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City of Birmingham

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1920

BIRMINGHAM :

THE BIRMINGHAM PRINTERS, LIMITED, HILL STREET AND STATION STREET.

—
1921



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PUBLIC HEALTH DEPARTMENT,
THE COUNCIL HOUSE,
BIRMINGHAM,

July, 1921.

TO THE CHAIRMAN AND MEMBERS OF THE PUBLIC HEALTH
COMMITTEE.

MY LORD MAYOR, LADIES, AND GENTLEMEN,

I submit herewith the report on the health of the City during the year 1920, as required by the regulations of the Ministry of Health.

The statistics indicate generally that despite many adverse social conditions resulting from the Great War the City continued to enjoy relatively good health during the whole year. We have year after year been getting better statistics in regard to most of the diseases about which something is known as to their prevention. The year under review is probably the best on record.

There is every indication that the slow process of spreading knowledge as to how to prevent disease or how to maintain good health is bearing fruit. This is an aspect of Public Health work which has not been sufficiently recognised in the past. It is probably more important to educate people than it is to provide such necessities as good drainage and good water, although both the latter are most important. In this country it is not always easy to ascertain how best to spread information on health matters. Particularly is this so in the case of the careless, ignorant, and thrifless classes. Frequently what appeals to these is thought to be redundant and unnecessary to those already educated.

The great and outstanding difficulty in our health work at the present time is our inability to provide decent homes for the large number of people who are now sufficiently educated to make proper use of them. For a number of years we have been crippled in our ability to take action to destroy slum properties and thus get rid of the baneful influence of the environment of such dwellings. At the present time I do not see any ready method of getting out of the condition that the country has got into as the result of destroying the confidence of investors in small house property except by again restoring this confidence.

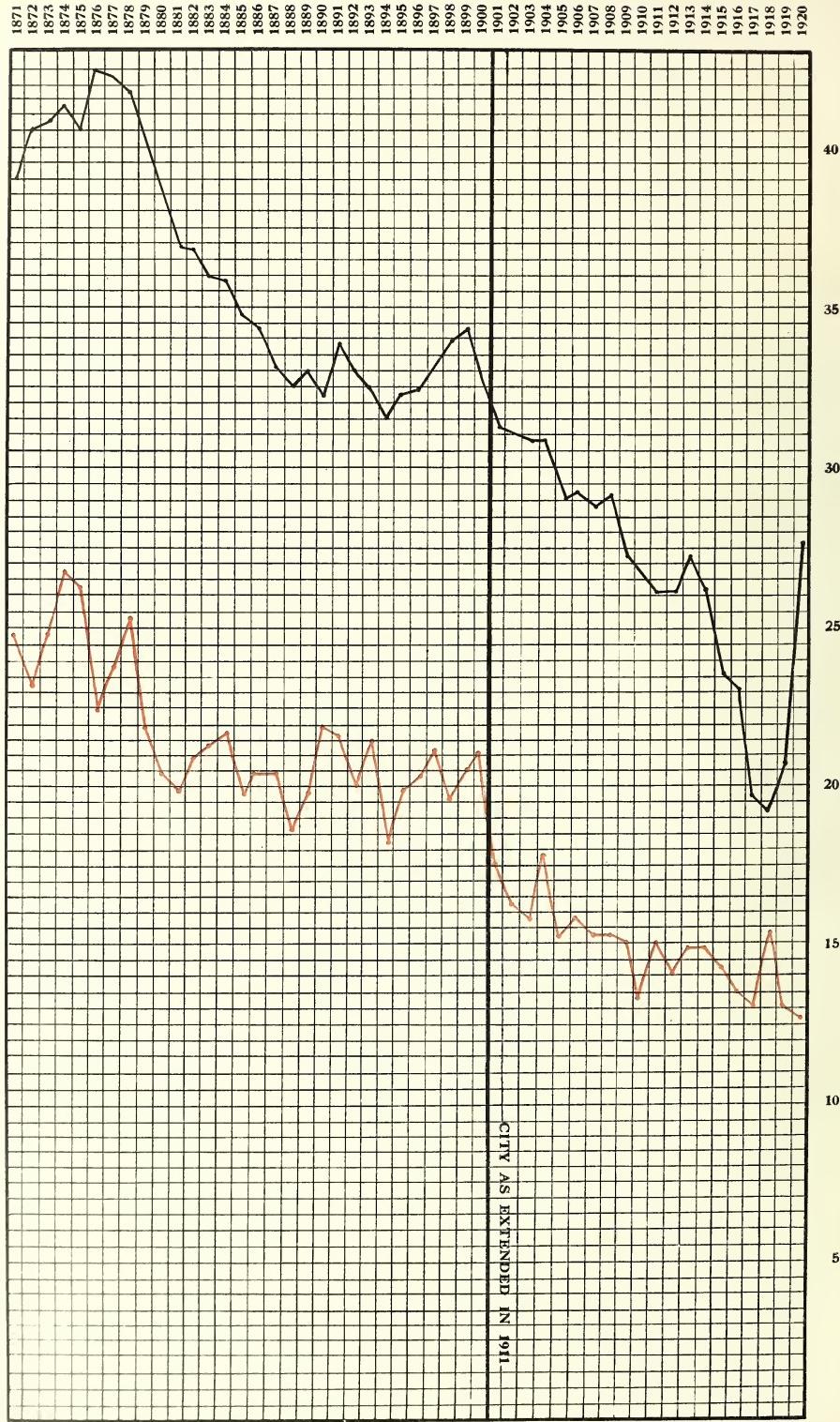
I am,

Your obedient servant,

JOHN ROBERTSON,

Medical Officer of Health.

BIRTH-RATE AND DEATH-RATE PER 1,000.



CITY AS EXTENDED IN 1911

BIRTH-RATE - —————

DEATH-RATE —————

City of Birmingham.

REPORT OF THE MEDICAL OFFICER OF HEALTH

For the year 1920.

POPULATION.

For the purpose of this report the population of Birmingham is taken at 910,000. It is probably more than this number, but without a Census it is impossible to form a more accurate estimate. The Registrar-General estimated the population at 896,217 for the purpose of the birth-rate, and 895,915 for the purpose of the death-rate, but his estimate was made without any knowledge of the local conditions.

The natural increase, *i.e.*, the excess of births over deaths, for the year 1920 was 13,660, as compared with 7,335 in the previous year and 3,665 in 1918. In pre-war years the natural increase was fairly uniform, at a little over 10,000. The rise in the natural increase was due, of course, to the larger number of births which have taken place during 1920, as compared with preceding years, and the comparatively small number of deaths.

MARRIAGES.

There were 7,527 couples married during 1920, as compared with 9,115 in the preceding year. The marriage-rate was therefore 16.6 per 1,000 of the population, a rate which corresponds closely to the rate of pre-war years.

BIRTHS.

There were 25,069 births registered during the year. This is equal to a birth-rate of 27.6 per 1,000. The birth-rate for each year since 1871 is shown on the chart opposite. It will be noted that the year 1920 was marked by a considerable increase in the birth-rate over that in the preceding years.

ILLEGITIMACY.

Of the births 894 were illegitimate, as compared with 858 in 1919, 858 in 1918, and 834 in 1917. The illegitimacy rate was 3.6 per cent. of the births. The pre-war illegitimacy rate was about 3 per cent., or a little more, the highest figures reached being in 1918, when the rate was 5.1 per cent., and in 1919, when it was 4.4 per cent.

NOTIFICATION OF BIRTHS.

There were 24,335 births notified in accordance with the Notification of Births Act out of a total of 25,069 which occurred, that is to say, 97 per cent. of the births were notified. The object of the Notification of Births Act was to obtain earlier information as to where births occurred, so that advice might be given at an earlier period than was formerly possible on the breast feeding of the baby.

There were during the year 911 still-births reported, the proportion of still-births to live-births being slightly lower than in the previous year.

DEATHS.

The deaths of 11,409 persons belonging to Birmingham were recorded in 1920, as compared with 12,000 in the preceding year, and 13,175 in 1918.

The death-rate for 1920 was 12.6 per 1,000. As will be seen in one of the following tables, this is one of the lowest death-rates ever recorded in Birmingham for a year. It is similar to the death-rate which occurred in 1917. The annual death-rate for a long series of years is set out in the chart on the opposite page.

DEATH-RATES PER 1,000 IN BIRMINGHAM, 1871 TO 1920.

	Birmingham.	England and Wales.
1871-1875 (Old City)	25.2	22.0
1876-1880	22.8	20.8
1881-1885	20.7	19.4
1886-1890	20.2	18.9
1891-1895	20.3	18.7
1896-1900	20.5	17.7
1901-1905 (Present Area)	16.5	16.0
1906-1910	15.0	14.7
1911-1915	14.6	14.3
1916	13.5	14.4
1917	12.6	14.4
1918	15.2	17.6
1919	13.0	13.8
1920	12.6	12.4

COMPARATIVE DEATH-RATES IN EIGHT LARGEST TOWNS.

(From Registrar-General's Figures.)

Glasgow	15.0 per 1,000
Birmingham	12.6 "
Liverpool	15.7 "
Manchester	13.0 "
Sheffield	13.2 "
Leeds	14.3 "
Bristol	11.7 "
Edinburgh	13.0 "

The next table gives the figures of population, birth-rates and death-rates in wards:—

WARD BIRTH-RATES AND DEATH-RATES, 1920.

	Ward.	Approximate Population.	Birth-rate.	Death-rate.
Central Wards	St. Paul's	29,200	37.6	16.9
	St. Mary's	32,800	37.2	20.4
	Duddeston and Nechells	42,300	39.6	16.3
	St. Bartholomew's	39,700	35.9	16.6
	St. Martin's and Deritend	42,600	34.9	17.6
	Market Hall	18,700	30.2	12.8
	Ladywood	30,800	33.5	17.5
Middle Ring	Lozells	35,100	25.2	11.8
	Aston	42,100	32.0	11.9
	Washwood Heath	36,400	27.9	11.4
	Saltley	28,600	28.6	11.1
	Small Heath	29,900	23.4	11.0
	Sparkbrook	36,400	25.9	12.0
	Balsall Heath	41,100	25.1	12.8
Outer Ring	Edgbaston	35,400	18.8	11.1
	Rotton Park	41,300	30.2	13.7
	All Saints'	44,100	31.3	12.7
	Soho	28,100	23.8	11.6
	Sandwell	19,600	21.7	9.4
	Handsworth	27,500	21.4	9.5
	Erdington North	17,400	24.7	9.5
	Erdington South	18,700	22.8	9.3
	Yardley	17,000	26.4	10.4
	Acock's Green	28,700	24.4	10.4
	Sparkhill	24,200	19.3	10.0
	Moseley and King's Heath	27,300	19.9	10.0
	Selly Oak	26,800	26.7	10.0
	King's Norton	21,800	21.3	9.0
	Northfield	9,300	22.9	8.2
	Harnborne	16,300	19.6	10.2

It will be noted that in only one ward in Birmingham was the death-rate more than 17.6 per 1,000, and that was in St. Mary's Ward, where the death-rate of 20.4 per 1,000 was recorded. St. Mary's Ward has had almost uniformly for a very large number of years the highest mortality rate

in the City. It will be noted that the great mass of the people who live in the Central Wards of the City still have mortality rates about 70 per cent. higher than the large population living in the outer ring of Municipal Wards.

Compared with former years, the mortality in the Central Wards shows as great a proportionate reduction as that in any other area of the City, but there is still room for very great improvement in these central areas, and until the suggestions which have been made in previous reports as regards, first of all, the town-planning and, subsequently, the reconstruction of these central areas, there can be no doubt that the mortality in them must always be unnecessarily high. It is always necessary to qualify such a statement by drawing attention to the fact that it does not carry with it the possibility of these improvements arising immediately the dwellers in the central area are transferred into better housing conditions. From my long experience of dealing with the people of Birmingham, I have no doubt that the dwellers in the central areas will be greatly improved in their habits of life if they are given reasonable surroundings. The present environment is so pernicious that immense harm is being done to those who have to live in these crowded districts.

Deaths from	CHIEF CAUSES OF DEATH.					Average 1915-1920.	Increase or Decrease. 1920.
	1915.	1916.	1917.	1918.	1919.		
Measles	420	101	333	71	189	223	147 — 76
Whooping Cough	121	378	131	277	60	193	182 — 11
Diphtheria	135	116	112	160	126	130	201 + 71
Influenza	146	146	98	2,172	1,062	725	421 — 304
Pulmonary Tuberculosis	1,141	1,107	1,169	1,171	1,019	1,121	843 — 278
Other Tuberculosis	236	217	236	214	169	214	158 — 56
Cancer	885	897	912	883	935	902	1,014 + 112
Cerebral Haemorrhage	559	467	485	455	473	488	464 — 24
Convulsions (under 5)	154	165	139	107	96	134	111 — 23
Organic Diseases of Heart	1,256	1,290	1,298	1,183	1,187	1,243	1,143 — 100
Arterio Sclerosis	135	156	152	137	203	157	184 + 27
Cerebral Embolism and Thrombosis	101	124	121	127	98	184	100 — 84
Bronchitis	1,219	1,148	910	1,059	1,285	1,124	1,066 — 58
Pneumonia	1,140	1,006	846	1,270	1,013	1,055	1,011 — 44
Diarrhoea and Enteritis	684	489	366	445	260	449	309 — 140
Nephritis and Bright's Disease	326	307	290	251	230	281	200 — 81
Premature Birth	401	404	389	379	437	402	507 + 105
Debility, etc.	359	263	258	182	208	254	207 — 47
Old Age	637	629	611	451	628	591	576 — 15
Suicide	47	46	55	60	98	61	98 + 37
Accident	402	358	340	300	314	343	313 — 30

The table shows the number of deaths from each of certain causes during the past five years and the increase or decrease in the total deaths from each cause, as compared with the average of the five years. It will be seen that in 1920 there was a decrease in deaths from influenza, a considerable decrease in deaths from pulmonary tuberculosis, from organic disease of the heart, and from diarrhoea and enteritis. On the other hand there were considerable increases in deaths from cancer and premature birth, the latter being partly accounted for by the increase in the total births.

RATES OF MORTALITY AT AGES, 1920.

The approximate population, together with the number of deaths and the death-rate at certain ages, are set out below:—

	Approximate Population.	Deaths.	Approximate Death-rate per 1,000.
Under 1 year	23,000	2,072	90.3
1 and under 2	17,700	493	27.9
2	14,700	177	12.0
3	15,020	152	10.1
4	17,380	116	6.7
5	97,000	343	3.5
10	90,000	178	2.0
15	87,000	201	2.3
20	86,500	256	3.0
25	164,400	619	3.8
35	126,340	947	7.5
45	85,900	1,201	14.0
55	50,020	1,436	28.8
65 and upwards	35,040	3,218	92.1

INFANT MORTALITY.

(See page 24.)

INFECTIOUS DISEASES.

The deaths during 1920 from some of the chief infectious diseases were as follows :—

DISEASE.		Deaths in 1920.	Average 1910-19.	Above or below the average.
Enteric Fever	.. .. .. ..	—	16	— 16
Smallpox	.. .. .. ..	—	—	—
Measles	.. .. .. ..	147	283	— 136
Scarlet Fever	.. .. .. ..	110	83	+ 27
Whooping Cough	.. .. .. ..	182	219	— 37
Diphtheria	.. .. .. ..	201	140	+ 61
Diarrhoea and Enteritis	.. .. .. ..	309	626	— 317
Pulmonary Tuberculosis	.. .. .. ..	843	1,065	— 222
Other Forms of Tuberculosis	.. .. .. ..	158	235	— 77
Influenza	.. .. .. ..	421	415	+ 6

The prevalence of the notifiable diseases is shown in the next table :—

DISEASE.	Cases in 1920.	Average 1910-19.	Above or below the average.
Enteric Fever	12	67
Smallpox	—	—
Scarlet Fever	5,563	3,840 + 1,723
Diphtheria	1,755	1,026 + 729
Erysipelas	385	647 — 262
Puerperal Fever	148	105 + 43
Ophthalmia Neonatorum	444	Only recently notifiable.
Pulmonary Tuberculosis	2,609	" "
Other forms of Tuberculosis	365	" "
Acute Primary or Influenzal Pneumonia	1,733	" "
Cerebro-Spinal Fever	25	" "
Acute Poliomyelitis	1	" "
Encephalitis Lethargica	18	" "
Malaria	154	" "
Dysentery	13	" "
Trench Fever	—	" "

In addition to the above the following cases were reported by the elementary school teachers :—

	1920.
Whooping Cough
Chicken Pox
Mumps
Measles
German Measles

The outstanding feature in the above tables is the large number of cases of Scarlet Fever and Diphtheria which occurred during the year, and which are commented on under special headings.

ENTERIC FEVER.

There were 12 cases of this disease reported during 1920, without a death. The corresponding figures for the last five years are shown below :—

	Cases Reported.	Deaths.	Mortality rate per cent.
1916	19	5	26
1917	22	7	32
1918	23	5	22
1919	34	9	26
1920	12	0	—

The virtual disappearance of Typhoid Fever from a city of the size of Birmingham is a remarkable fact. Twenty years ago there was an average of 500 cases per annum. It was then a plague and a disease of high mortality and great expense to the community, the cases since then having gradually declined in number with a direct relationship to the better cleansing of the town. Probably the one item which has done more than anything else has been the removal of the filthy privies and pail closets in Birmingham.

Ninety-eight samples of blood were sent to the Bacteriological Laboratory for examination in suspected cases of Enteric Fever, 22 of which gave a positive result. Of the 12 cases reported blood tests were made in 11 instances. The results were as follows:—

Widal Reaction positive to both Bac. Typhosus and Bac. Paratyphoid B. in	3 cases.
Widal Reaction positive to Bac. Typhosus only	4 ..
Widal Reaction positive to Bac. Paratyphoid B. only	2 ..
Widal Reaction negative to both Bac. Typhosus and Bac. Paratyphoid B. in	2 ..
Blood not examined in	1 ..
	—
	12 ..
	—

SMALLPOX.

There were no cases of Smallpox in Birmingham during 1920. In England and Wales 263 cases occurred during the year, 83 of them being at Middleton, in Lancashire. During the year from 2 to 54 cases were reported each month, and except in the case of Middleton there was no outbreak of importance following the importation of the disease. Most of the cases were introduced directly or indirectly from abroad.

During the year there was a very large number of persons who came to Birmingham from abroad and who had been reported to have been in contact with the disease on board ship. In all cases they had been satisfactorily vaccinated, and no Smallpox occurred.

The fact, however, remains that Smallpox is being constantly introduced into this country, and that by good luck Birmingham has escaped an importation of the disease for a long number of years now. It is, however, essential that our organisation for dealing with this disease should be kept efficient, otherwise it might happen at any time that Smallpox would spread in Birmingham.

VACCINATION.

The following statement shows the vaccinal state of the infants born during the year ending June 30th, 1920:—

Births returned	24,210
Conscientious objections	4,662, or 19.3% of total.
Died unvaccinated	1,608
Successfully vaccinated	14,387, or 63.7% of survivors.
Insusceptible	78, or 0.3% "
Postponed by medical certificate	572, or 2.5% "
Removed to other districts	394, or 1.7% "
Lost sight of	926, or 4.2% "
Still under notice	1,583, or 7.0% "

MEASLES AND GERMAN MEASLES.

There were 7,144 cases of Measles reported to the Public Health Department in 1920 and 477 of German Measles. The cases and deaths from Measles since 1901 are shown below:—

	CASES.		DEATHS.		Death-Rate (Measles only).
	Measles.	German Measles.	Measles.	German Measles.	
1901	?	?	372	?	.49
1902	?	?	237	?	.31
1903	?	?	245	?	.32
1904	?	?	243	?	.31
1905	?	?	300	?	.38
1906	?	?	275	?	.34
1907	?	?	409	?	.51
1908	?	?	70	?	.08
1909	?	?	676	?	.82
1910	?	?	42	?	.05
1911	?	?	395	?	.47
1912	7,693*	1,088*	571	3	.67
1913	3,661*	85*	398	1	.46
1914	4,612*	61*	310	—	.35
1915	8,144*	680*	420	—	.47
1916	10,635	4,996	101	1	.11
1917	15,516	472	333	4	.37
1918	5,413	300	71	1	.08
1919	15,158	565	189	—	.20
1920	7,144*	477*	147	2	.16

* Partial notification only through schools.

From these it will be seen that Measles is very much more prevalent than German Measles. While compulsory notification was in force German Measles occurred in the proportion of one case of German Measles to seven of ordinary Measles.

The deaths from Measles numbered 147. From the above table it will be seen that this number has on many occasions been greatly exceeded. No hospital accommodation is available in Birmingham for cases of Measles, but arrangements have been made with the Birmingham District Nursing Society to nurse any case of Measles which a Health Visitor finds in a house where nursing would be an advantage or in cases in which the District Nursing Society's nurses have patients requiring nursing, if they immediately report the case to us. It is probable that some of the reduction in the deaths from Measles which has taken place during recent years has been due to our endeavour to nurse cases of Measles where formerly no such provision was made.

As in former years, so during 1920, Measles was uniformly distributed throughout the City. Very few children appear to escape an attack of Measles, but the death-rate from the disease in the poorer areas is approximately five times as high as it is in the better class wards of the City.

SCARLET FEVER.

The epidemic of Scarlet Fever which commenced in the Autumn of 1919 continued throughout the whole of 1920, and during the latter year there were 5,563 cases notified and 110 deaths recorded, as compared with 2,821 cases and 45 deaths in 1919. The mortality rate based on cases notified was 2.0% and the death-rate per 1,000 of the population was 0.12.

In previous years the cases notified have been as follows:—

Year.	Cases.	Year.	Cases.
1911	3,587	1916	1,796
1912	5,505	1917	1,143
1913	8,447	1918	1,035
1914	6,764	1919	2,821
1915	2,978	1920	5,563

The age incidence of the cases notified in 1920 was:—

Under 1 year.	1 year.	2 years.	3 years.	4 years.	5—9 years.
35	116	212	358	455	2,817
10—14 years.	15—19 years.	20—24 years.	25—44 years.	45 and over.	
1,033	260	122	147	8	

Of the 5,563 cases reported, 3,612 were removed to hospital, *i.e.*, 65%, and 1,951 were kept at home. The deaths among the hospital cases numbered 89, showing a mortality rate of 2.4%, while of the home nursed cases 21 died, a mortality rate of 1.1%. In addition to the above, 19 cases were also admitted to Little Bromwich and 21 to Lodge Road from Sutton Coldfield, and there were no fatalities among these Sutton cases.

SECONDARY CASES OF SCARLET FEVER.

Of the 3,612 patients removed to hospital, 218 cases after removal were followed in the homes by 293 secondary cases of Scarlet Fever. While being treated at home or before admission to hospital 319 patients were followed by 389 secondary cases.

RETURN CASES OF SCARLET FEVER.

(These are cases occurring in a home within 28 days of the return from hospital, or release from home isolation, of an infecting case.)

Of the 5,563 cases notified, 305 (a percentage of 5.5) were return cases following 225 infecting cases, of whom 193 were discharged from hospital and 32 from home isolation.

The occurrence of Return Cases is shown in the following table:—

Hospital.	New cases admitted during the year.	Infecting case discharged.	No. of Infecting Cases each followed by						Total Return Cases.
			1 Return Case.	2 Return Cases.	3 Return Cases.	4 Return Cases.	9 Return Cases.		
Little Bromwich ..	2,257	115	91	18	6	—	—	—	145
Lodge Road ..	1,156	58	38	18	1	1	—	—	81
West Heath ..	199	14	8	2	3	—	—	1	30
*Witton ..	—	6	4	2	—	—	—	—	8
Home Isolation ..	1,951	32	26	3	3	—	—	—	41
	5,563	225	167	43	13	1	1	1	305

* No new cases were admitted to Witton, but convalescents were transferred from Little Bromwich.

The hospital Return Cases during the last six years have been as follows:—

Notified Cases.	No. removed to Hospital.	Return Cases.	Percentage of return cases to admissions.
1915 2,978	2,107	126	6.0
1916 1,796	1,329	60	4.5
1917 1,143	901	48	5.3
1918 1,035	797	55	6.9
1919 2,821	2,158	75	3.5
1920 5,563	3,612	264	7.3

WHOOPING COUGH.

The deaths from Whooping Cough numbered 182. From the following table it will be seen that this is a larger number than in the preceding year, but considerably less than in some of the previous years. The fact is also borne out that as in previous years the deaths occurred mainly among children under two years of age.

	1916.	1917.	1918.	1919.	1920.
Under 1 year	162	41	95	19	77
Between 1 and 2 years	130	47	98	21	59
Between 2 and 3 years	47	22	45	8	17
Between 3 and 4 years	21	8	19	7	12
Between 4 and 5 years	8	7	9	2	9
Over 5 years	10	6	11	3	8
	378	131	277	60	182

In the case of Whooping Cough the same arrangements are in existence as in the case of Measles, whereby nurses are available for patients who are suffering from the disease in a severe form.

DIPHTHERIA AND CROUP.

During the year 1920 no less than 1,755 persons were attacked with Diphtheria, and 201 deaths were due to the disease. This is the largest number of cases since our records commenced, but the case-mortality was lower than in 1914, when the previous highest record of cases was made, being at the rate of 11%, as compared with 16%.

The following table shows the number of cases notified, the rate per 1,000 of the population, and certain particulars in regard to deaths since 1871.

	Cases Notified.	Case-Rate per 1,000 of Population.	Deaths.	Death-Rate per 1,000.	Case Mortality per cent.
1871	—	—	165	.48	—
1872	—	—	178	.51	—
1873	—	—	217	.60	—
1874	—	—	158	.44	—
1875	—	—	142	.39	—
1876	—	—	131	.35	—
1877	—	—	136	.36	—
1878	—	—	164	.43	—
1879	—	—	166	.42	—
1880	—	—	131	.33	—
1881	—	—	131	.33	—
1882	—	—	124	.31	—
1883	—	—	125	.31	—
1884	—	—	113	.27	—
1885	—	—	116	.28	—
1886	—	—	195	.47	—
1887	—	—	150	.36	—
1888	—	—	105	.25	—
1889	—	—	111	.26	—
1890	283*	0.69	123	.28	43
1891	205	0.48	59	.14	29
1892	533	1.10	115	.24	22
1893	387	0.79	98	.20	25
1894	406	0.83	108	.22	27
1895	741	1.50	219	.44	30
1896	1,194	2.35	312	.61	26
1897	713	1.41	171	.34	24
1898	689	1.36	139	.27	20
1899	720	1.40	149	.29	21
1900	542	1.05	86	.17	16
1901	789†	1.04†	125†	.16†	16†
1902	1,118	1.44	189	.24	17
1903	1,176	1.52	176	.23	15
1904	902	1.15	167	.21	19
1905	972	1.23	136	.17	14
1906	1,165	1.46	138	.17	12
1907	1,459	1.81	159	.20	11
1908	1,229	1.49	168	.20	14
1909	1,136	1.38	167	.20	15
1910	1,063	1.28	112	.13	11
1911	1,134	1.35	112	.13	10
1912	807	.95	101	.12	13
1913	991	1.13	169	.19	17
1914	1,623	1.84	260	.30	16
1915	1,072	1.21	135	.15	13
1916	951	1.07	116	.13	12
1917	770	0.86	112	.13	14
1918	881	1.02	160	.18	18
1919	970	1.05	126	.14	13
1920	1,755	1.93	201	.22	11

* Notification became compulsory on January 20th, 1890.

† The figures from 1901 onwards relate to Greater Birmingham.

NOTE.—In recent years the cases have been revised as far as possible to exclude errors in diagnosis.

DIPHTHERIA AND CROUP IN BIRMINGHAM.

There can be no doubt that during the year in question Diphtheria was prevalent in epidemic form during the whole year. The epidemic commenced in 1919 and continued all through the year. It will be noted that the mortality, although very high, was not so high as in many previous years. In 1896 it was .61 per 1,000.

DISTRIBUTION OF THE CASES.

As in former epidemic periods Diphtheria was rather more prevalent in the better class artisan property and in the middle class houses of Birmingham than in the slum districts. The average case-rate was 1.73 per 1,000 in the central wards, 2.00 in the middle ring of wards, and 1.95 in the outer ring of wards. The case mortality was 11% in the central area, 13% in the middle ring of wards, and 8% in the outer ring of wards.

DIPHThERIA IN WARDS.

		Cases Notified.	Case-rate per 1,000.	Case Mortality per cent.
Central Wards	St. Paul's	57	1.95	12
	St. Mary's	62	1.89	11
	Duddeston and Nechells	66	1.56	8
	St. Bartholomew's	80	2.02	Average 17
	St. Martin's and Deritend	60	1.41	20
	Market Hall	37	1.98	5
Middle Ring	Ladywood	46	1.30	7
	Lozells	79	2.25	15
	Aston	85	2.02	11
	Washwood Heath	81	2.23	15
	Saltley	76	2.66	10
	Small Heath	55	1.84	Average 7
	Sparkbrook	67	1.84	12
	Balsall Heath	111	2.70	21
	Edgbaston	51	1.44	10
	Rotton Park	79	1.91	15
Outer Ring	All Saints'	50	1.13	18
	Soho	52	1.85	10
	Sandwell	42	2.14	2
	Handsworth	61	2.22	8
	Erdington North	28	1.61	4
	Erdington South	42	2.25	21
	Yardley	44	2.59	11
	Acock's Green	49	1.71	Average 4
	Sparkhill	39	1.61	13
	Moseley and King's Heath	30	1.10	17
	Selly Oak	36	1.34	3
	King's Norton	46	2.11	9
20 years and over	Northfield	6	0.65	—
	Harborne	68	4.17	6
	Total	1,755	201	11

The age incidence and mortality are shown in the following table, which indicates very clearly that Diphtheria is enormously more fatal in the early years of life than later :—

Ages.		Cases Notified.	Deaths Registered.	Case Mortality per cent.
Under 1 year		27	12	44
Between 1 and 2 years		48	20	42
" 2 " 3 "		71	16	23
" 3 " 4 "		114	25	22
" 4 " 5 "		129	26	20
" 5 " 10 "		710	79	11
" 10 " 15 "		310	16	5
" 15 " 20 "		131	2	2
20 years and over		215	5	2
Total		1,755	201	11

The percentage of the mortality among patients treated in hospital compared with those treated at home is indicated in the following table :—

			Mortality per 100 Cases.
		City Hospitals.	At home or elsewhere.
1905	..	10.6	17.0
1906	..	11.1	11.6
1907	..	10.6	9.6
1908	..	12.7	13.4
1909	..	12.0	14.6
1910	..	10.6	12.9
1911	..	11.5	10.2
1912	..	10.2	12.3
1913	..	16.0	16.3
1914	..	14.1	13.6
1915	..	11.1	10.9
1916	..	8.4	16.7
1917	..	12.8	17.8
1918	..	16.0	19.9
1919	..	10.7	15.0
1920	..	11.1	12.2

The results of hospital treatment are more satisfactory than they appear to be, because it is almost universally the custom to send severe cases into hospital, while a good many of the mild cases are left at home.

There can be no doubt that sufficient use is not yet being made of the laboratory as an aid to the diagnosis of suspicious throat illnesses in children. Only 2,716 swabs were examined either as an aid to diagnosis or as a test of freedom from infection during the whole of the year, the cost of examination being £663 10s. 0d.

Another ever-present difficulty is that mothers do not call in a doctor sufficiently early in cases of Diphtheria, or the doctor when he is called in does not make up his mind as to the diagnosis soon enough for anti-toxin to be of its greatest use.

During the year under review the first case of death from Anaphylaxis Shock after the use of Diphtheria anti-toxin occurred. Anti-toxin has been given freely at all our hospitals during the past fifteen years, and probably no less than 30,000 cases have been treated with anti-toxin without serious result. In the case of the death which occurred on November 27th the patient was a healthy girl of sixteen years of age, who died within fifteen minutes of the dose of anti-toxin being administered. Before the anti-toxin was given careful enquiries were made from her and her parents as to whether she had previously had anti-toxin.

Below is quoted a paragraph from the writings of the late Professor Sir William Osler on the value of anti-toxin and of large doses of it :—

“ DOSAGE.—This is one of the most important questions relating to the use of anti-toxin. J. H. McCollom, of the Boston City Hospital, who probably had a richer experience with the disease than any man in the United States, insisted that the guiding practice in the use of the anti-toxin is to give it until the characteristic effects are produced, whether 4,000 or 70,000 units be required for this result. He very rightly said that in the case of a patient ill with Diphtheria there is no way of estimating the quantity of toxin generated by the membrane, and therefore one must administer the agent until the characteristic effect is produced, viz., the shrivelling of the membrane, the diminution of the nasal discharge, the correction of the fetid odour, and a general improvement in the condition of the patient. No case, he says, in the acute stage should be considered hopeless. When one sees a patient in whom the intubation tube has been repeatedly clogged, when the hopeless condition of the patient changes for the better after the administration of 50,000 units, one cannot help but be convinced of the importance of giving large doses of anti-toxin in the very severe and apparently hopeless cases. In the majority of instances these large doses are not required, particularly if the patients are seen early in the attack, 4,000 to 6,000 units being enough to produce the characteristic effect on the membrane. The initial doses in ordinary cases should be from 3,000 to 10,000 units, and the result must determine the frequency of repetition. In severe cases and in laryngeal diphtheria the first dose should be from 10,000 to 15,000 units, repeated in six hours. The danger is in giving too small and not too large a dose.”

INFLUENZA.

There were 421 deaths attributed to Influenza during the year 1920. In the preceding year, which was one of the epidemic years, there were 1,062 deaths. The epidemic which commenced in June, 1918, showed two waves, one in March, 1919, and one reaching its maximum in the beginning of April, 1920, this latter being very much less fatal than the previous waves of the disease. The course of the disease in recent years has followed very closely that of the great epidemics of the past, when every one or two years high mortality occurred, these years being followed by years of lower mortality until the disease practically ceased.

DIARRHOEA AND ENTERITIS.

There were 309 deaths from Diarrhoea and Enteritis. In preceding years the numbers have been as shown in the table below:—

	Deaths from Diarrhoea and Enteritis.	Death-rate per 1,000.	Maximum Air Temperature*	Days with 75 or over.*	Maximum Soil Temperature (4ft. deep).*	Amount of Rain.*
1901	1,320	1.74	88.0	17	56.0	5.91
1902	634	.82	81.4	4	53.9	7.51
1903	921	1.19	83.8	4	53.8	9.85
1904	1,422	1.82	81.8	16	55.8	5.75
1905	839	1.06	80.3	7	55.4	7.33
1906	1,439	1.80	90.6	15	56.2	2.97
1907	511	.63	76.8	1	53.2	6.08
1908	873	1.06	82.0	7	54.2	6.94
1909	535	.65	84.4	9	54.3	7.63
1910	541	.65	73.9	0	53.2	8.24
1911	1,390	1.65	93.9	40	57.2	3.27
1912	346	.41	82.2	4	53.9	10.99
1913	970	1.11	79.4	6	54.0	4.51
1914	767	.87	82.6	8	55.3	7.00
1915	684	.77	74.6	0	54.3	8.34
1916	489	.55	82.1	14	54.8	5.42
1917	366	.41	78.4	5	54.0	9.74
1918	445	.51	81.3	13	55.9	9.83
1919	260	.28	83.0	12	55.0	8.44
1920	309	.34	73.0	0	53.0	7.59

* In the third quarter of the year.

TUBERCULOSIS.

There were fewer new cases of Pulmonary Tuberculosis notified in 1920 than in any year since notification commenced.

There was a much lower death-rate from Pulmonary Tuberculosis in 1920 than in any previous year on record.

There were fewer cases of non-Pulmonary Tuberculosis notified than ever before, and the mortality rate of 0.17 per 1,000 of the population was less than in 1919. As will be seen elsewhere, the death-rate from this group was little more than one-half of the rate for the whole of England and Wales.

These are the outstanding and satisfactory facts in regard to Tuberculosis in 1920.

TUBERCULOSIS CASES NOTIFIED IN 1920.

Pulmonary Tuberculosis	..	..	..	..	2,609
Tubercular Meningitis	..	..	..	..	39
Tubercle of the Abdomen	..	..	..	..	48
Tubercle of the Spinal Column	..	..	..	..	26
Tubercle of the Joints	..	..	..	..	43
Disseminated Tuberculosis	..	..	..	..	22
Tubercle of Glands and Other Parts	..	..	..	..	187

COST OF PREVENTIVE WORK.

The following are the amounts devoted directly to anti-tuberculosis work, in visitors for the sick and on sanatoria and hospitals. Along with the figures of expenditure are placed the figures for Total Deaths and Total Notifications.

	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Deaths from all forms										
Tuberculosis ..	1230	1292	1341	1293	1377	1324	1405	1385	1188	1001
Death rate per 1,000..	1.46	1.52	1.53	1.47	1.55	1.48	1.56	1.60	1.28	1.10
Notifications ..	3363*	4394*	5196	3815	3518	3830	3543	3254	3116	2974
Gross Expenditure on										
Tuberculosis by										
Municipality ..	£7,789	£12,337	£19,753	£29,506	£48,354	£46,981	£58,344	£65,169	£80,973	£104,599

* Pulmonary only.

PULMONARY TUBERCULOSIS.

The following figures indicate the prevalence and morbidity since 1914 :—

	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Notified Cases ..	3,317	3,027	3,388	3,074	2,905	2,704	2,609
Deaths ..	1,059	1,141	1,107	1,169	1,171	1,019	843
Morbidity % ..	32	38	33	38	40	38	32
Recovery Rate % ..	68	62	67	62	60	62	68

The cases and deaths in previous years are set out below :—

	Cases Notified.	No. of Deaths.	Death-rate in Birmingham.	Death-rate in England and Wales.
1901 ..	— ..	1,120 ..	1.47 ..	1.26
1902 ..	— ..	1,071 ..	1.38 ..	1.23
1903 ..	— ..	992 ..	1.28 ..	1.21
1904 ..	— ..	1,018 ..	1.30 ..	1.24
1905 ..	— ..	994 ..	1.26 ..	1.14
1906 ..	— ..	908 ..	1.14 ..	1.16
1907 ..	— ..	898 ..	1.11 ..	1.15
1908 ..	— ..	1,021 ..	1.24 ..	1.12
1909 ..	— ..	1,008 ..	1.22 ..	1.09
1910 ..	— ..	898 ..	1.08 ..	1.01
1911 ..	— ..	958 ..	1.14 ..	1.08
1912 ..	4,394 ..	1,088 ..	1.28 ..	1.04
1913 ..	4,229 ..	1,041 ..	1.19 ..	1.01
1914 ..	3,317 ..	1,059 ..	1.20 ..	1.04
1915 ..	3,027 ..	1,141 ..	1.28 ..	1.16
1916 ..	3,388 ..	1,107 ..	1.24 ..	1.18
1917 ..	3,074 ..	1,169 ..	1.30 ..	1.25
1918 ..	2,905 ..	1,171 ..	1.35 ..	1.34
1919 ..	2,704 ..	1,019 ..	1.10 ..	1.00
1920 ..	2,609 ..	843 ..	0.93 ..	—

The notified cases in 1912 and 1913 probably included a number of old cases reported for the first time.

MALE AND FEMALE INCIDENCE AND MORTALITY.

Pulmonary Tuberculosis was notified in 1,529 males and 1,080 females during 1920, and 513 males and 330 females died of the disease.

In the following table the notified cases are set out for males and females for each year from 1914 to 1920 :—

PULMONARY TUBERCULOSIS, 1914-1920. NOTIFIED CASES IN AGE AND SEX GROUPS.

AGES.	MALES.							FEMALES.						
	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Under 10 ..	194	188	267	245	182	173	114	162	189	251	212	184	121	112
10-15 ..	149	138	185	173	170	132	87	141	152	215	214	180	112	90
15-20 ..	135	90	112	116	114	92	92	127	108	125	106	116	90	89
20-25 ..	181	129	161	117	108	165	231	218	192	170	150	156	143	158
25-35 ..	392	326	388	355	370	424	385	444	383	334	353	335	286	321
35-45 ..	338	352	370	364	356	359	375	272	267	301	244	249	208	189
45-55 ..	228	207	213	173	185	178	170	139	126	131	109	78	88	80
55 up ..	126	115	100	96	86	97	75	71	65	65	47	36	36	41
	1,743	1,545	1,796	1,639	1,571	1,620	1,529	1,574	1,482	1,592	1,435	1,334	1,084	1,080

If the whole series of seven years are taken, it is found that the morbidity rate at various ages was as follows. In interpreting the figures, it must be remembered that the deaths do not correspond with the identical cases notified, but as a seven years average has been taken, the general indications derived from the morbidity-rates may be taken as approximately accurate:—

PULMONARY TUBERCULOSIS. AVERAGE MORBIDITY-RATES PER 1,000 CASES NOTIFIED, 1914-1921.

		Males.	Females.
Ages under 15	..	77	89
„ 15-24	..	276	322
„ 25-34	..	336	290
„ 35-44	..	534	400
„ 45-54	..	749	554
„ 55 upwards	..	952	712
All Ages	..	402	304

Prior to 1860 in the whole of England and Wales the death-rate among women used to be equal to that among men. Since 1860 the rate has been higher among males, and this difference has increased in each decennial period.

In the last decennium it was approximately .5 per 1,000 of the population higher among males than females.

It is difficult to explain why the incidence and mortality should be so much higher among males than among females.

The notifications per 100 deaths continue to be more numerous in Birmingham than in any other large cities:—

PULMONARY TUBERCULOSIS, 1920.

	Notified Cases.	Deaths.	Notified Cases per 100 deaths.
Glasgow	2,240	1,181	189
Birmingham	2,609	843	310
Liverpool	2,074	1,102	188
Manchester	1,507	868	174
Leeds	962	552	174
Sheffield	1,133	451	251

DISTRIBUTION OF PULMONARY TUBERCULOSIS IN BIRMINGHAM.

			Case-rate per 1,000.	Average 1920	3.96
			1915-19		
Central Wards	St. Paul's	3.63	Average 1920	3.96
	St. Mary's ..	..	4.91	
	Duddeston and Nechells ..	..	4.09	
	St. Bartholomew's ..	..	4.23	
	St. Martin's and Deritend ..	..	4.13	
	Market Hall ..	..	2.62	
Middle Ring	Ladywood	4.12	Average 1920	2.67
	Lozells ..	..	2.56	
	Aston ..	..	2.95	
	Washwood Heath ..	..	2.39	
	Saltley ..	..	2.18	
	Small Heath ..	..	2.11	
Outer Ring	Sparkbrook	2.61	Average 1920	2.67
	Balsall Heath ..	..	2.75	
	Edgbaston ..	..	1.50	
	Rotton Park ..	..	4.16	
	All Saints' ..	..	3.20	
	Soho ..	..	2.81	
	Sandwell	1.48	Average 1920	2.14
	Handsworth ..	..	2.84	
	Erdington North ..	..	2.41	
	Erdington South ..	..	2.19	
	Yardley ..	..	2.18	
	Acock's Green ..	..	2.13	
	Sparkhill	2.03	Average 1920	2.12
	Moseley and King's Heath ..	..	1.83	
	Selly Oak ..	..	2.43	
	King's Norton ..	..	1.65	
	Northfield ..	..	2.04	
	Harborne ..	..	1.78	

The foregoing table indicates that the reduction in prevalence is general over the whole City with one or two unimportant exceptions.

The figures repeat the indication of previous years that Tuberculosis is twice as prevalent in the crowded central areas as in the suburban areas.

OTHER FORMS OF TUBERCULOSIS.

	Cases Notified.	No. of Deaths.	Death-rate in Birmingham.	Death-rate in England and Wales.
1901	—	395	.52	.54
1902	—	285	.37	.51
1903	—	370	.48	.54
1904	—	351	.45	.54
1905	—	322	.41	.49
1906	—	295	.37	.50
1907	—	343	.43	.47
1908	—	287	.35	.47
1909	—	248	.30	.45
1910	—	270	.32	.42
1911	—	272	.32	.38
1912	—	204	.24	.33
1913	967	300	.34	.34
1914	498	234	.27	.32
1915	491	236	.27	.35
1916	442	217	.24	.35
1917	469	236	.26	.37
1918	349	214	.25	.35
1919	412	169	.18	.26
1920	365	158	.17	—

VARIETIES OF NON-PULMONARY TUBERCULOSIS.

	Cases notified in 1920.	Deaths not notified as cases.	Total Deaths.
Tubercular Meningitis	39	24	56
Abdominal Tuberculosis	48	18	26
Tuberculosis of Spine	26	14	18
Tuberculosis of Joints	43	3	10
Tuberculosis of other organs, mostly glands	187	7	12
Disseminated Tuberculosis	22	11	36

TUBERCULOSIS PREVENTION.

A great deal has been done directly and indirectly in Birmingham in the education of the public in regard to the prevention of Tuberculosis.

The dwellers in houses where cases are notified are, almost without exception, instructed either at the Sanatorium or during the numerous visits paid to the dwelling by the Tuberculosis Visitor. It is almost certain that this instructional work, here as elsewhere, is responsible for the reduction in Tuberculosis in the community by lessening the chance of infection and by increasing resistance to it through more wholesome methods of life. Indeed this may be regarded as the most important method of attack.

In addition, hospital accommodation is helping considerably in the improvement in the general mode of life of a large number of people, arising from better knowledge as to foods, housing, and health methods generally. Much yet remains to be done to bring the standard of living up to what may be considered reasonable, so that the resistance of the body to disease is kept at a high level.

Certain details regarding this work are given in the following paragraphs and in the report submitted by Dr. Dixon.

Upon the receipt of a notification of a case of Tuberculosis the name of the patient is entered at once on the Tuberculosis Register. As compulsory notification has been in force for some years, preceded by voluntary notification, and as no name is removed from the Register except in the case of death, removal from the City Area, or the pronouncement of a cure after medical examination and the absence of symptoms for two years, the number of patients on the Register on the 31st December, 1920, was no less than 15,709.

In order that these cases may be kept under supervision by periodical and systematic visitation, and that newly notified cases may be visited without delay, a staff of 15 Tuberculosis Visitors is engaged, including a Superintendent. During the year 3,139 visits were paid to patients notified for the first time, and 37,958 re-visits were paid to patients already on the Register, in addition to 4,176 calls where the visitor was unable to see anyone. In order to ensure that the cases that are in most need of assistance are re-visited as frequently as possible, the cases on the Register are classified into (1) soldiers, (2) cases requiring special attention, and (3) ordinary cases. There are 1,726 ex-Service men whose disease has been attributable to Army service or aggravated thereby, and the Ministry of Pensions, in order to ensure that cases in this class are being frequently visited, contribute towards the cost to the extent of paying the salaries of three visitors. Every patient in this class is visited once every three months.

The conditions which determine whether a case should be included amongst those requiring special attention, and consequently more frequent visitation, are unsatisfactory home conditions (either carelessness in the home, overcrowding, lack of general sanitation, etc.), insufficient nourishment, and those to whom assistance has been granted either in the form of nourishment or the provision of a shelter or bed and bedding in order to ensure proper isolation. This class forms about one-third of the patients on the Register, and a visit is paid on an average once every four months.

The third class consists of the remaining cases, and these are visited at least once every nine months.

The duties of the Tuberculosis Visitor cover a very large field. Her primary duty is to see that the patient is taking all reasonable precautions to prevent the spread of infection. This includes such important matters as the re-arrangement of the sleeping accommodation so as to ensure that the patient will not share a bed, nor, if possible, the same bedroom with other members of the household. Advice is given as to how this can best be done, and on subsequent visits recalcitrant patients are requested to comply with the suggestions offered. In those cases where the patient is unable to provide a separate bed, a scheme is in operation, where the financial conditions of the family warrant it, by which bed and bedding can either be provided on loan or on payments spread over a considerable period, in the form of hire-purchase. The total number of beds so distributed to patients up to the end of the year was 390, including 70 which are being purchased by small instalments. As a direct result of this work, 541 patients who were found on a previous visit to be sharing a bed, had made arrangements to sleep alone, and 266 patients who were sharing the same bedroom with other members of the family, were found on re-visiting to be occupying separate bedrooms. In suitable cases recommendation is made for the provision of shelters to be erected in the garden. The number of shelters in use at the end of the year was 132, 51 being occupied by ex-Service men and 81 by other cases. The method of the disposal of sputum is also carefully supervised, and patients are advised verbally and by leaflets how best to keep well.

Advice is given in the most needy cases as to how relief and extra nourishment may be obtained. During the year 72 cases were recommended for extra nourishment and 9 for clothing.

Extra nourishment was provided by the Insurance Committee for insured persons, and other patients were supplied by the Citizens' Committee after due enquiry.

The Tuberculosis Visitor makes special enquiries into the health of the other occupants of the house in which there is a consumptive, and, in special cases where they show indications of bad health and are living in close contact with the patient, arrangements are made for them to attend at the Anti-Tuberculosis Dispensary at Broad Street for examination. 938 patients presented themselves for examination as contacts during the year, and of these 408 were recommended for admission to a sanatorium, 26 for admission to hospital, and 77 for out-patient treatment at Broad Street Centre, while 40 were referred for domiciliary treatment.

In the course of her visits the Tuberculosis Visitor notes all sanitary defects and reports them to the Sanitary Inspector. During the year under review, the following reports were made:—

Houses to be cleansed	79
Houses damp	214
Houses in bad repair	442
Houses badly ventilated	16
Drains defective	43
Closets defective	60
Other nuisances	93

In addition to the general routine visitation as described above, a large amount of work falls under the heading of Special Visits. These include arrangements for disinfection of premises and bedding following the removal of a patient to a sanatorium or another address, or after the death of a patient; enquiries into cases where patients fail to enter a sanatorium when advised of a vacancy, or failure to attend the Dispensary for examination when given an appointment; advice as to cleanliness, etc., to patients who are found to be unsatisfactory in this respect; and investigation into financial conditions with a view to determining the suitability for the provision of extra nourishment of cases recommended by general practitioners and others.

The patients and suspects examined at Broad Street Centre by your Committee's staff of Tuberculosis Officers were as follows :—

TUBERCULOSIS PATIENTS EXAMINED AT BROAD STREET CENTRE.

	New Patients.	Contacts or Suspects.	Old Patients Re-examined.
Completed Examinations	1,665	938	3,727
No. recommended for Sanatorium ..	862	408	325
" " Hospital ..	103	26	75
" " Dispensary ..	167	77	1,395
" " Domiciliary ..	77	40	819
No treatment required at present ..	456	387	1,113
Incomplete Examinations	995	520	91
Total Examinations	2,660	1,458	3,818

The number of patients sent to the different Sanatoria is given in the statement below :—

PATIENTS TREATED AT SANATORIA.

	Yardley Road.	Salterley Grange.	Romsley Hill.	West Heath.	Witton.	Total.
In sanatorium at beginning of year	215	83	105	88	63	554
Admitted	849	315	551	276	182	2,173
Discharged	721	335	539	227	121	1,943
Died	90	2	11	70	41	214
Remaining at end of year	253	61	106	67	83	570

The number of patients who attended at Broad Street Centre for out-patient treatment (in most cases after a previous stay at a sanatorium) was as follows :—

TREATMENT AT BROAD STREET DISPENSARY.

New Patients attending for treatment .. .. ..	..	..	..	..	975
Total attendances of old and new patients .. .. ..	..	..	..	..	31,239

Dental treatment was given to 204 patients.

A report was recently issued by a Sub-Committee of the Birmingham Insurance Committee on the results of Sanatorium benefit afforded to insured persons recommended for treatment in 1914. Similar investigations had been recorded for all patients treated, by Dr. Dixon and the Medical Officer of Health.

The Insurance Committee's findings may be summed up in the following extract from paragraph 26 of this report :—

"A death-rate of 50 per cent. in six years, with retention of full working capacity in 72 per cent. of the survivors, whilst much better than the results obtained in areas where the problem has been dealt with half-heartedly, leaves much margin for improvement."

TUBERCULOSIS AND THE MILK SUPPLY.

(REPORT BY MR. BRENNAN DE VINE, F.R.C.V.S., VETERINARY SUPERINTENDENT.)

INSPECTION OF COWS AND COWSHEDS IN THE CITY.

The number of registered cowkeepers, dairy farms, sheds, and cows in the City on 31st December was as follows :—

Cowkeepers.	Dairy Farms.	Registered Sheds.	Cows.
136	179	367	1,860

During the past year 1,848 visits of inspection have been paid by the Veterinary Officers.

Thirty-eight cows were found affected with catarrhal mastitis, and the milk from these cows was prohibited from sale temporarily or permanently, according to the circumstances.

The health and condition of the cows in the City dairies during the year has on the whole been good.

TUBERCULOSIS AND THE MILK SUPPLY.

The effort to reduce the amount of Tuberclie infection in the milk sold in the City has been continued on the lines of previous years.

The following milk samples have been taken :-

	Farms in City area.		Farms outside.		Railway Stations.	Total.
	Mixed.	Individual.	Mixed.	Individual.		
	Tubercle Free	Infected	—	—		
Tubercle Free	1	8	6	11	68	94
,, Infected	—	1	3	1	5	10
	1	9	9	12	73	104

From this it will be seen that of the whole of the cows in the City only one was found to be giving tubercle infected milk : this cow was subsequently disposed of for slaughter and £4 compensation paid to the owner. The cow giving the infected sample taken at an outside farm was traced, and this cow was also disposed of for slaughter. In connection with the other infected samples taken at outside farms and railway stations, the examination of these was not completed by 31st December, 1920.

ERADICATION OF TUBERCULOSIS FROM DAIRY HERDS.

During the year 21 herds, comprising 596 cows, were being dealt with under the scheme for the eradication of tuberculosis from herds supplying milk to the City. Of these, 15 herds, numbering 425 cows, were "free," and 6 herds, numbering 171 cows, were being freed.

Five new herds, comprising 146 cows, were tested for the first time, and the testing of 6 herds, comprising 142 cows, was discontinued. Of the 6 herds discontinued 4 were disposed of, one was moved to a farm from which the milk did not come to the City, and in the other case there were so many reactors that the owner decided not to continue under the scheme.

No.	Approximate No. of Cows in Herd.	Herds Free.	Herds being Freed.	Breeding Herds.	Non-breeding Herds.	Mixed Breeding and Non-breeding Herds.	City Dairies.	Outside Dairies.
1	25	—	1	—	—	1	—	1
2	6	1	—	—	1	—	—	1
3	12	1	—	—	1	—	1	—
4	18	1	—	—	—	1	—	1
5	10	1	—	—	1	—	1	—
6	36	1	—	—	1	—	1	—
7	100	1	—	1	—	—	1	—
8	15	1	—	—	—	1	—	1
9	24	1	—	1	—	—	—	1
10	37	1	—	1	—	—	—	1
11	31	1	—	1	—	—	—	1
12	24	1	—	1	—	—	—	1
13	15	1	—	—	—	—	—	1
14	26	1	—	—	—	1	—	1
15	17	1	—	—	—	1	—	1
16	54	1	—	—	—	1	—	1
17	20	—	1	—	—	1	—	—
18	23	—	1	1	—	—	—	1
19	71	—	1	1	—	—	—	1
20	13	—	1	—	—	1	—	1
21	19	—	1	1	—	—	—	1
—	18	Discon tinued	—	—	—	—	—	—
—	51	Discon tinued	—	—	—	—	—	—
—	21	Discon tinued	—	—	—	—	—	—
—	20	Discon tinued	—	—	—	—	—	—
—	13	Discon tinued	—	—	—	—	—	—
—	19	Discon tinued	—	—	—	—	—	—

COW TESTING.

The testing of the above herds has been carried out half-yearly. From the tabulated list it will be seen that 907 cows were tested during the year, of which 790 passed the test and 117 failed to pass.

No.	Cows Tested.	Passed.	Reactors and Doubtful.	Failed.
1	25	18	..	7
2	11	11	..	—
3	22	22	..	—
4	39	38	..	1
5	6	6	..	—
6	53	33	..	20
7	107	104	..	3
8	19	12	..	7
9	33	31	..	2
10	63	63	..	—
11	57	57	..	—
12	24	24	..	—
13	27	26	..	1
14	26	24	..	2
15	17	13	..	4
16	100	79	..	21
17	20	7	..	13
18	50	31	..	19
19	71	60	..	11
20	11	7	..	4
21	25	24	..	1
—	24	24	..	—
—	49	48	..	1
—	19	19	..	—
—	9	9	..	—
	907	790	..	117

The cows which failed to pass were in most cases cows which were purchased subject to their passing the tuberculin test, or cows in herds tested for the first time. The newly purchased cows which failed to pass the test were returned to the vendors. The doubtful reactors in tested herds were isolated and again subjected to the test a month later. About 70% of these doubtful reactors eventually passed.

The newly purchased and cows tested for the first time numbered 281. Of these 49 or 17.43% reacted and 14 or 4.98% were doubtful, i.e., 22.41% failed to pass the test as compared with 26.45% last year.

COST INCURRED BY TESTING HERDS.

The testing of the herds has continued to be carried out, partly by the Corporation Veterinary Officers and partly by local Veterinary Surgeons on behalf of the Corporation. The cost of this work during the year was £126 0s. 7d., of which £30 6s. 0d. was for Tuberculin and £95 14s. 7d. for veterinary fees and expenses. In 1919 the cost was £133 5s. 0d., and in 1918 £81 14s. 4d.

INFANT MORTALITY.

With the object of curtailing public expenditure, a discussion has recently taken place as to the amount of work which local authorities should undertake in regard to this department of the work, having for its object the reduction of child mortality and the improvement in health of the surviving infants and children.

In the course of this discussion certain ill-informed persons have made statements to the effect that value was not obtained for the expenditure involved. It is certainly true to say that like all educational expenditure, the results are not immediately apparent, and it is often doubtful what part a particular piece of work has played in the improvement which has taken place in the health of the children. A very considerable amount of money is now expended by the City of Birmingham in Child Welfare work, the total working expenses during the year ending March 31st, 1921, being £46,586.

Until about twenty years ago practically nothing was done to reduce the child mortality in this country, but the movement commenced here and in most other areas at about that time. The actual volume of work done was, however, very small, and could not during these early years have had very much influence on the child mortality in the City. Gradually, however, it has been extended until over 85 per cent. of all the births are visited and instructions given subsequently in the

direction of the better education of the mother in regard to the feeding of her infant and other children. The number of these visits and the number of instructional attendances at various Centres are set out in later tables in this report.

The practical effect of this work has been to reduce child mortality to about one-half of what it was twenty years ago; that is to say, in a normal year there is now a saving of about 3,000 lives, which would be lost if the mortality was as high now as it was twenty years ago. But this is not all. There is very definite evidence that the surviving children are enormously better in health as the result of the instruction given to the child's mother.

In the following table the average mortality in five-yearly periods is set out since 1871, together with similar figures for England and Wales:—

	Birmingham.	England and Wales.
1871-75 (Old City Area)	182	153
1876-80	161	145
1881-85	161	139
1886-90	173	145
1891-95	176	151
1896-1900	199	156
1901-05 (Extended City)	157	138
1906-10	131	117
1911-15	126	110
1916-20	94	91
1920	83	80

It will be seen that during the past five years the mortality in Birmingham averaged 94 per 1,000 births, and that in England and Wales, where the rural population is included as well as the urban population, the mortality was 91. The mortality for the City last year was 83 per 1,000 babies born, *i.e.*, the lowest infant mortality rate ever recorded in Birmingham.

The mortality rates in the various municipal wards are set out in the following statement:—

	Infant Mortality Rate, 1920.	Infant Mortality Rate, 1912—1919.	Increase or Decrease.
Central Wards :	St. Paul's	112	145
	St. Mary's	121	173
	Duddeston and Nechells	93	150
	St. Bartholomew's	111	150
	St. Martin's and Deritend	102	137
	Market Hall	85	135
Average infant mortality rate, 104.	Ladywood	105	126
	Lozells	80	98
	Aston	78	117
	Washwood Heath	83	96
	Saltley	72	92
	Small Heath	80	84
Middle Ring :	Sparkbrook	80	89
	Balsall Heath	98	81
	Edgbaston	64	83
	Rotton Park	79	111
	All Saints'	78	107
	Soho	55	89
Outer Ring :	Sandwell	75	72
	Handsworth	51	79
	Erdington North	61	71
	Erdington South	47	72
	Yardley	54	80
	Acock's Green	64	79
Average infant mortality rate, 55.	Sparkhill	73	62
	Moseley and King's Heath	53	60
	Selly Oak	64	73
	King's Norton	43	74
	Northfield	28	70
	Harborne	50	69
City		83	108
			—25

In a parallel column the mortality rate for the years 1912-1919 is added. It will be noticed that in practically all the wards of the City where the infant mortality is highest the reduction in the mortality is greatest. The figures for St. Mary's, St. Bartholomew's, St. Paul's, Ladywood, and St. Martin's and Deritend are not satisfactory. During the year 1920 they were at the rate of over 100 per 1,000 births. St. Mary's Ward is the unfortunate possessor of a record for high infant mortality over a long period of years.

The infantile mortality rates in the eight largest towns (from the Registrar-General's figures) were as follows :—

Glasgow	..	..	..	..	..	..	107
Birmingham	..	..	..	..	..	..	83
Liverpool	..	..	..	..	..	..	111
Manchester	..	..	..	..	..	..	94
Sheffield	..	..	..	..	..	..	104
Leeds	..	..	..	..	..	..	105
Bristol	..	..	..	..	..	..	69
Edinburgh	..	..	..	..	..	..	89
England and Wales	..	..	..	..	..	..	80

The record for infant mortality in Birmingham compares favourably with that in the eight other large towns of this country, only one town, viz., Bristol, with a population of 375,641, having a better record than Birmingham.

It is very frequently stated that the improvement in child welfare during recent years has been entirely due to the fact that we have had a number of cold summers. This, however, is not borne out by the Birmingham statistics, which show that the infant mortality which is not due to Diarrhoea and Enteritis has been reduced at almost as great a rate as the total mortality. This will be seen in the accompanying table :—

Year.		Total Infant Mortality Rate.	Infant Mortality less Diarrhoea and Enteritis.
1897 (Old City Area)	..	214	147
1898	..	190	135
1899	..	193	130
1900	..	199	151
1901	..	188	141
1902	..	157	133
1903	..	158	126
1904	..	195	145
1905	..	155	124
1906 (Present Area)	..	157	110
1907	..	133	117
1908	..	130	105
1909	..	121	106
1910	..	115	99
1911	..	150	108
1912	..	111	102
1913	..	129	100
1914	..	122	100
1915	..	118	95
1916	..	104	90
1917	..	101	89
1918	..	99	84
1919	..	84	76
1920	..	83	74

The next table shows the causes of death and the ages during the first year of life :—

INFANTILE MORTALITY DURING THE YEAR 1920.

Deaths from stated Causes in Weeks and Months under One Year of Age.

Cause of Death.	Weeks.				Total under One month	Months.				Total Deaths under One Year.
	0.	1.	2.	3.		1.	3.	6.	9.	
Measles	—	—	—	—	—	3	2	8	17	30
Scarlet Fever	—	—	—	—	1	1	—	—	4	2
Whooping Cough	—	—	—	1	1	2	20	17	21	77
Diphtheria and Croup	—	—	—	—	—	2	1	1	8	12
Influenza	—	—	—	—	1	1	3	4	7	21
Tuberculous Meningitis	—	—	—	—	—	1	4	2	5	12
Abdominal Tuberculosis	—	—	—	—	1	1	—	4	2	1
Other Tuberculous Diseases	—	—	—	—	—	—	1	2	4	8
Rickets	—	—	—	—	—	—	1	1	1	2
Syphilis	3	3	2	2	10	19	6	3	4	42
Cerebro-Spinal Fever	—	—	—	—	—	—	2	2	—	4
Meningitis (not Tuberculous)	—	1	—	—	—	1	3	7	8	22
Convulsions	17	10	7	7	41	19	18	9	6	93
Bronchitis	1	8	7	7	23	62	53	30	30	198
Pneumonia (all Forms)	3	3	7	8	21	64	68	63	73	289
Gastritis	—	1	1	1	3	15	6	5	2	31
Diarrhoea, Enteritis, etc.	1	2	6	7	16	59	68	33	30	206
Congenital Malformations	27	15	10	3	55	31	8	1	1	96
Premature Birth	362	40	33	25	460	38	7	1	1	507
Atrophy, Debility and Marasmus	65	18	19	14	116	47	33	8	3	207
Atelectasis	30	1	1	—	32	—	—	1	—	33
Injury at Birth	22	2	1	—	25	—	—	—	—	25
Neglect (under 3 months)	9	—	—	—	9	1	—	—	—	10
Suffocation (Overlaying)	4	1	3	3	11	8	5	2	—	26
Other Causes	15	6	5	7	33	25	18	17	10	103
All Causes	560	110	103	88	861	422	334	233	222	2072

The table shows that out of 2,072 deaths under one year of age no less than 861 occurred among infants during the first four weeks of life. After this period was passed, the number who died declined fairly uniformly with each month of life, so that during the last three months of the period the average number of deaths per month was about 75.

The same table gives the main causes of death of these infants. These may be grouped firstly into prematurity, congenital defects, and general weakness at birth; from these 810 died. Secondly, diseases of the respiratory organs, viz., Bronchitis and Pneumonia, from which 487 deaths occurred; and thirdly, Diarrhoea, Enteritis, and Gastritis, from which 237 infants died.

SUFFOCATION BY OVERLAYING.

Twenty-seven deaths from this cause were investigated by the Health Visitors. The information given varies to some extent, but considering the cases as a whole it can be seen that in the majority of cases the children were apparently healthy. More than half were under a month old, and were the children of parents over 30 years of age. A disproportionate number of deaths occurred on Sundays, that is, the child apparently died between 12 midnight and 8 a.m. on Sunday morning; the other days with the higher proportion of deaths were Mondays and Thursdays. It might be noted in this connection that Saturday and Wednesday are half-holidays for different sections of the population. In 21 cases the infant was sleeping with both parents, in 2 with the mother alone, and in 3 with other children in addition to the parents. In all but two cases the parents were said to be respectable and sober persons.

The death from suffocation of 17 healthy babies and of 10 babies who were not in any way seriously ill, indicates clearly the importance of impressing on mothers and midwives the necessity for a separate crib for the infant no matter how primitive such a crib may be. In one case the child habitually slept in a separate cot, but was taken into bed by the mother on the night of its death as

it was a cold night. One of the cases included in this investigation was a child who died of suffocation while sleeping alone. This child was a twin aged 4 months, and was apparently far from well; it was therefore in a separate class and has not been included among the other cases.

Age of Child.				Health.			
Under 10 days	..	..	5 cases.	Good	..	..	17 cases.
From 10 days to 1 month	..	6	"	Debility	..	..	6 "
From 1 month to 3 months	..	8	"	Bronchitis	..	..	1 "
From 3 months to 6 months	..	5	"	Skin	..	..	1 "
From 6 months to 9 months	..	2	"	No information	..	..	1 "
<hr/>				Total	..	26	..
<hr/>				Total	..	26	..
Age of Parents.				Day of Death.			
Under 20	..	..	3 cases.	Sunday	..	..	8 cases.
From 20 to 30	..	..	7 "	Monday	..	..	5 "
Over 30	..	..	14 "	Tuesday	..	..	3 "
No information	..	..	2 "	Wednesday	..	..	1 "
				Thursday	..	..	5 "
				Friday	..	..	2 "
				Saturday	..	..	2 "
<hr/>				Total	..	26	..
<hr/>				Total	..	26	..

The number of deaths from overlaying have diminished markedly since 1915, not only in proportion to the births but in actual numbers. Prior to 1915 there was a slight proportional fall after the extension of the City boundaries, but no actual diminution in numbers. A table is appended showing this :—

Year.	Births.	Deaths under 1 year from overlaying (suffocation).	Death-Rate per 1,000 births.
1900	16,941	92	5.4
1901	16,735	92	5.5.
1902	17,103	70	4.1
1903	16,866	95	5.6
1904	16,902	83	4.9
1905	15,795	70	4.4
1906	16,016	82	5.1
1907	15,619	73	4.7
1908	16,141	78	4.8
1909	14,985	56	3.7
1910	14,898	81	5.4
1911	14,704	64	4.4
1912*	22,168	89	4.0
1913	23,812	91	3.8
1914	23,207	87	3.7
1915	21,187	79	3.7
1916	20,618	27 (? Drink restrictions)	1.3
1917	17,706	38	2.1
1918	16,840	28	1.7
1919	19,335	33	1.7
1920	25,069	27	1.1

* City Extended.

ILLEGITIMACY AND INFANT MORTALITY.

It is notorious that babies born illegitimate have a death-rate between two and three times as high as that of legitimate babies, notwithstanding the fact that at birth the illegitimate babies are probably as healthy, if not healthier, than legitimate ones. The illegitimate death-rate among Birmingham babies under one year of age was 195 per 1,000 births, as against 79 per 1,000 for legitimate babies.

STILLBIRTHS.

During the year 911 stillbirths were reported, as against 744 in the preceding year. In the report for 1919 details were set out as to stillbirths occurring in the City, and it was shown that stillbirths occur with fair uniformity among the whole population and amongst mothers of all ages and all parties.

CHILD MORTALITY. (AGES 1-4 INCLUSIVE.)

The total number of deaths of children over 1 year and under 5 during each year since 1912 can be seen below :—

1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
1,649	1,545	1,519	1,362	1,275	1,121	1,390	1,008	938

From this table it will be seen that the number of children who die at the above ages each year appears to be decreasing.

The causes of death of these children are set out below :—

Cause.	1917.	1918.	1919.	1920.
(1) Measles	246	51	133	98
(2) Whooping Cough	84	171	38	97
(3) Diphtheria	62	65	54	87
(4) Scarlet Fever	6	4	17	57
(5) Tuberculosis, all forms	107	79	67	55
(6) Bronchitis and Pneumonia	294	480	390	297
(7) Diarrhoea and Enteritis	63	83	48	45
(8) Burns	42	30	23	20
(9) All other causes	217	427	238	182

It will be noted that the preponderating causes of death during each of the recent years were Bronchitis and Pneumonia. It is satisfactory to know that Diarrhoea and Enteritis, which used to be the cause of a high mortality, is now relegated to a place of minor importance. The second place in importance is taken by Measles, and then follow closely Whooping Cough and Diphtheria.

DEATHS FROM SCALDS.

Eleven cases were investigated, and of these the injuries were produced by boiling water in 9 cases and by tea in 2 cases. Death in one case was due to Diphtheria, which developed subsequent to the injury.

The age incidence is as follows :—

Under 1 year .. . . .	..	..	..	..	..	1
From 1 to 2 years .. . . .	..	..	..	..	..	5
From 2 to 3 years .. . . .	..	..	..	..	..	2
From 3 to 6 years .. . . .	..	..	..	..	..	3
Total .. . . .	..	..	..	..	..	11
						—

DEATHS FROM BURNS.

Twenty-seven cases were investigated. In 3 cases the accident occurred outside the home, 1 affecting a girl of 15 in a factory.

The age incidence was as follows :—

Under 1 year .. . . .	..	..	..	..	..	7
From 1 to 2 years .. . . .	..	..	..	..	..	3
From 2 to 3 years .. . . .	..	..	..	..	..	6
From 3 to 4 years .. . . .	..	..	..	..	..	3
From 4 to 5 years .. . . .	..	..	..	..	..	3
From 5 to 10 years .. . . .	..	..	..	..	..	3
From 10 to 15 years .. . . .	..	..	..	..	..	2
Total .. . . .	..	..	..	..	..	27
						—

At the time of the accident 12 of the victims were alone in the house or room, 10 were with other children, and 4 were with parents or other adults. Of those under 12 months 4 were alone in the house and 3 were with other young children. In 5 cases the fireguard was said to be inadequate, but there was only 1 case of actual neglect. In 1 case death was due to Scarlet Fever developing subsequent to the accident.

MATERNITY AND CHILD WELFARE CENTRES.

The first of the two following tables gives a list of Centres and shows the scope of the work carried out at each. The second table indicates approximately the amount of work done at each Centre.

MATERNITY AND CHILD WELFARE CENTRES.

Available for all Centres.

W = For Weighing only

MATERNITY AND CHILD WELFARE—YEAR 1920.

31

1920	Berkeley Road,	Hay Mills,	Bromley Street,	Farm Street.	Hope Street,	Wimborne Street,	Shorthorn Street.	Smith Street.	Streetford Road.	Washwood Heath Rd.	Wright Street.	Floodgate Street.	Solby Oak.	Stainforth Street,	Haworth.								
Infants and Children :—																							
Births reported ..	597	1581	137	1400	1796	1334	723	1471	1846	582	1602	1545	1214	1577	759	864	292	21540					
Primary visits ..	..	610	1577	140	1366	1406	727	1726	1729	562	1653	1185	1206	1503	391	735	849	257	21068				
Re-visits ..	..	3981	6913	1770	5744	11295	6169	5268	8029	11076	4306	11774	8553	4006	12490	4713	4318	135357	108a, Ashton Street.				
Total visits and re-visits ..	..	4591	8490	1910	110	12988	7575	5995	9755	12805	4868	13459	9738	5132	7958	12861	1519	1746	12871	5532	4575	156363	
Mothers :—																							
Primary visits ..	..	45	155	27	64	250	176	103	101	233	68	178	288	115	125	573	59	41	225	210	62	80	3178
Re-visits ..	..	40	158	56	96	269	188	280	75	328	98	299	145	156	176	1093	134	90	2333	276	96	265	6051
Total visits and re-visits ..	..	85	313	83	160	519	364	383	176	561	166	477	433	301	1666	193	131	2558	486	158	345	9829	
Children's Consultations :—																							
Number held ..	..	96	194	78	139	196	200	47	189	184	98	146	137	146	94	66	48	74	95	94	135	2504	
Fresh children attending ..	..	449	829	93	797	1273	1115	342	1563	1192	428	960	1013	680	836	594	294	283	352	470	573	260	11402
Total attendances ..	..	5809	6276	1409	4523	7942	8293	1970	12155	8611	4538	7149	7555	6018	4111	4664	1931	2100	5022	4080	5227	3896	112921
Number seen by Doctor ..	..	3010	4330	641	3144	3830	4280	1359	4108	3911	1966	3810	3400	3810	2659	1139	1117	432	853	2558	1176	2916	51152
Mothers' Consultations :—																							
Number held ..	..	50	49	16	48	49	51	21	45	49	48	49	46	48	45	17	12	22	49	45	49	49	857
Fresh mothers attending ..	..	219	290	7	190	341	391	77	220	347	148	287	266	184	163	118	28	206	138	62	186	3939	3939
Total attendances ..	..	443	480	25	320	737	701	176	617	965	401	698	609	386	288	239	135	74	422	368	83	655	8812
Attendance at :—																							
Sewing classes ..	..	270	387	102	—	483	105	371	—	—	—	374	761	370	404	312	—	237	1160	530	395	8976	
Cookery classes ..	..	—	—	106	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	887	
Health talks ..	..	—	1047	110	919	—	777	317	—	874	—	95	1410	644	820	290	—	—	—	—	—	37	10475

PUERPERAL FEVER.

The cases and deaths from Puerperal Fever are given in the following statement :—

PUERPERAL FEVER.

	Cases.	Deaths.	Deaths per 1,000 births, etc.
1912	78	1.07
1913	112	1.64
1914	149	1.24
1915	161	1.43
1916	170	1.29
1917	97	1.28
1918	92	1.49
1919	105	1.01
1920	148	1.75

123
33

Both the number of cases and the number ~~of~~^{of} deaths were considerably above those generally recorded in previous years. The Puerperal Fever deaths include the deaths occurring after abortion, and therefore the rate has been worked out after an estimate of the number of abortions and number of stillbirths are added.

Of the total number of Puerperal Fever cases, 139 were removed to the Women's Hospital or other institutions, with a morbidity of 35 per cent., while 9 remained at home, with a morbidity of 22 per cent.

MIDWIVES ACTS, 1902 AND 1918.

During the year 180 midwives notified their intention to practise midwifery in the City, and of these 96 were fully trained midwives and 84 were midwives who had been in practice prior to 1902 and had not been specially trained.

In 1920 the midwives attended 16,975 births, *i.e.*, 68 per cent. of the total births. Qualified midwives attended 8,529 of these, and *bona fide* midwives 8,446.

Medical help was advised by midwives on 1,799 occasions, the reasons being as follows :—

For Mother.	For Child.	
Delayed or difficult labour	529	Ophthalmia
Lacerated perineum	250	Debility
Abnormal presentation	135	Malformation
Haemorrhage	114	Skin eruption
Rise of temperature	103	Other causes
Adherent placenta	69	
Other causes	141	

One midwife, No. 219, was reported to the Central Midwives Board for a number of breaches of the regulations, and was struck off the Roll.

OPHTHALMIA NEONATORUM.

The number of cases notified in 1920 was 444, an increase of 162 from the previous year, when the notifications numbered 282. The birth-rate was higher also, and calculated as the attack rate per 1,000 births, the increase is from 14.6 to 17.7. The attack rate in 1920 is very slightly in excess of that for 1914, and the presumption is that the fall in the attack rate in the following five years is not being maintained. The possibility must be taken into consideration that a number of cases may now be notified which were formerly overlooked, but there appear to be no clear grounds for this supposition. There is an actual decrease in the number notified per midwife. The attendant at birth was a midwife in 316 out of 444 cases in which Ophthalmia Neonatorum occurred ; in 135 of these the midwives sent notifications, 100 being duplicated from the Eye Hospital or from private medical practitioners. The midwives are instructed to send all cases of discharging eyes in young infants, however slight, either to a private medical practitioner or to the Eye Hospital ; and a considerable proportion of the cases notified by the Eye Hospital and the private doctors have been sent in this way. The Eye Hospital sent a total of 319 notifications (including 125 duplicates) and

the private doctor sent 143 (including 71 duplicates). There is a considerable preponderance of very slight cases ; 240 of the 444 cases may be placed in this category, while 170 were of moderate severity, and there were 34 severe cases, the eyes being permanently damaged in 10 of these, 4 being practically blind in both eyes, while the remaining 6 had normal vision in one eye.

VENEREAL DISEASES.

The following tables give an indication of the number of cases dealt with in Birmingham during the year 1920. The number of new cases is for practical purposes the same as in 1919, but the number of attendances for treatment is, as the figures show, very much larger than in the preceding year. Probably at all times there will be a difficulty in securing that every person affected with Gonorrhœa will receive treatment. In the case of Syphilis the proportion of those who will not get any treatment will be comparatively small.

The new cases of Gonorrhœa last year numbered 1,375 ; the new cases of Syphilis numbered 1,145. The number of cases who ceased to attend before completion of treatment is not given in the returns for the Women's Hospital, but at the other two hospitals the figures were as follows :—

New cases treated : Gonorrhœa, 1,327 ; Syphilis, 1,077.

Ceased to attend before completion of treatment (old and new cases) : Gonorrhœa, 602 ; Syphilis, 438.

Ceased attendance after completion of treatment, but before final tests : Gonorrhœa, 782 ; Syphilis, 720.

VENERAL DISEASE TREATMENT, 1920.

(NOTE.—Figures for Skin and Urinary Hospital relate only to Birmingham residents ; figures for other Centres relate to all cases in attendance. About 90% of the total cases are Birmingham residents.)

A.—GONORRHEA.

	General Hospital		Skin and Urinary Hospital		Women's Hospital		Total for 1920.		Total for 1919.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Number of new cases ..	933	120	257	17	—	48	1190	185	1399	187
Total number of attendances ..	24409	1248	6950	267	—	207	31359	1722	11925	1531
Aggregate number of in-patient days	499	480	59	49	—	21	558	550	98	303
Ceased attendance before completion of treatment	472	54	75	1	—	?	547	55?	940	120
Ceased attendance after completion of treatment, but before final tests	535	70	160	17	—	0	695	87	—	—
Discharged after completion of treatment and observation	20	4	28	5	—	2	48	11	166	18
Number under treatment or observation, Jan. 1, 1920 ..	498	76	166	18	—	12	664	106	376	73
Number under treatment or observation, Jan. 1, 1921 ..	385	63	159	12	—	58	544	133	664	110

B.—SYPHILIS.

	General Hospital		Skin and Urinary Hospital		Women's Hospital		Total for 1920.		Total for 1919.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Number of new cases ..	554	336	150	37	—	68	704	441	782	459
Total number of attendances ..	9639	6642	3144	933	—	1723	12783	9298	10433	6881
Aggregate number of in-patient days	362	768	260	5	—	43	622	816	290	872
Ceased attendance before completion of treatment	185	162	71	20	—	?	256	182?	585	318
Ceased attendance after completion of treatment, but before final tests	384	215	93	28	—	0	477	243	0	1
Discharged after completion of treatment and observation	1	1	6	2	—	0	7	3	5	1
Number of doses of Salvarsan substitutes	6901		1227		1551		9679		8373	
Number under treatment or observation, Jan. 1, 1920 ..	414	255	157	47	—	90	571	392	380	275
Number under treatment or observation, Jan. 1, 1921 ..	390	205	131	33	—	157	521	395	571	410

The facilities for free treatment available at present in Birmingham are as follows :—

General Hospital :—

Tuesday mornings, from 10 to 12	For Men.
Monday, Tuesday, Wednesday, Friday, from 3 to 7.	
Tuesday mornings, from 10 to 12.	

Tuesdays and Fridays, from 3 to 7.	For Women.
------------------------------------	------------

Skin and Urinary Hospital :—

Tuesday evenings, from 6 to 7.30	For Men.
Friday evenings, from 6 to 7.30.	
Thursday evenings, from 5.30 to 7.	

Women's Hospital, Upper Priory :—

Thursdays, 1.30 to 4.	For Women.
Wednesdays, 6.30 to 8.	

The above particulars show some modification from those obtaining early in 1919.

Pathological Laboratories.—Approved laboratories for the examination of specimens for gonococci and for spirochetes and for the Wassermann reaction have been recognised at the University, the General Hospital, and Dr. Assinder's, and for the examination for gonococci and spirochetes at the Skin and Urinary Hospital.

All the above methods deal with the treatment of Gonorrhœa and Syphilis after the disease has been acquired. From a purely public health point of view it is much more important to prevent people contracting these diseases than to spend money on curing them when they have acquired the trouble. The expense of the treatment is heavy, as in indicated in the following table. There should be no question, therefore, that continued effort should be made to prevent promiscuous intercourse, and thus maintain health and save expense.

(A) Expenses of Centres.	£	s.	d.	£	s.	d.
Salaries of Medical Staff 1,603 4 8						
Salaries of Nurses, Orderlies, and Dispensers 837 15 10						
Clerical Salaries 290 8 2						
Rent, Rates, etc. 316 2 0						
Drugs 4,047 3 0						
In-patient treatment (2,353 days at 2/3.4) 268 15 6						
Equipment and Apparatus 353 0 0						
Alterations to Buildings, etc. 101 3 4						
Other Expenses 403 8 6						
				8,221	1	0

(B) Payments to Pathological Laboratories.

Dr. Assinder 590 19 4			
General Hospital 411 3 6			
University 217 15 8			
Skin Hospital 65 9 0			
	1,285	7	6

(c) Publicity Expenses.

Grant to National Council for combating Venereal Diseases 250 0 0			
Notice-plates (provision) 1 6 0			
University, Lectures 50 0 0			
Painting, etc. 49 10 3			
Copying, Stationery, etc. 14 15 11			
	365	12	2
Total	£9,872	0	8

The Public Health Committee has contributed £250 to the Birmingham Branch of the National Council for Combating Venereal Diseases. The function of this organisation is by lectures, posters, health talks, and in other ways to educate the people to a higher moral standard and in certain cases to the danger arising from venereal disease.

During the year under review a very large number of addresses have been given to the parents of children at school, with a view to teaching them how to present the subject to their children and the time at which this should be done. Many other lectures to adult audiences have been arranged,

and on the whole this part of preventive work has been satisfactorily carried on. Like much other preventive work, however, it is improbable that the effect will be immediately observable, but while this is so, such work will have more lasting value than teaching the public how to indulge in promiscuous intercourse without danger to health.

CANCER.

The number of deaths certified as due to this disease has nearly doubled since 1901, and is higher than in any previous year. It will be noted that the number of deaths last year is larger by 266 than in 1911. It will also be noted that the number of deaths, with few exceptions, is progressively increasing.

No other disease is increasing in prevalence like Cancer. The deaths are mainly at the ages of 35 years to 65 years, and in a large number of cases the illness is long and painful and often exceedingly expensive. One death was due to Cancer in every 11 deaths.

The deaths since 1911 were as follows :—

Year.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Total deaths	748	791	893	773	885	897	912	883	935	1,014

CEREBRO-SPINAL FEVER.

There were 25 cases of this disease reported during 1920 against 14 cases in 1919, 16 cases in 1918, and 29 cases each in 1917 and 1916. Of the 25 cases reported, 18 died and 7 recovered.

The ages of the patients affected were as follows :—

		Males.		Females.	
		Cases.	Deaths.	Cases.	Deaths.
0—1 year ..	..	2	2	1	1
1—5 years	..	6	2	4	2
6—10 years	..	1	0	1	1
11—15 years	..	0	0	1	1
16—20 years	..	3	3	1	1
21—30 years	..	1	1	1	1
31—40 years	..	0	0	2	2
41—50 years	..	1	1	0	0

Further particulars are given below :—

Case.	Date of notification.	M. or F.	Age.	Whether verified by bacteriological examination.	Result.	
					H.	N.H.
1.	Jan. 19	M.	17	Yes	Died 3 days after onset.	
2.	Jan. 19	M.	10	Yes	Recovery, no paralysis, but patient suffers from uncontrollable temper.	
3.	Jan. 26	F.	27	Yes	Died 2 days after onset.	
4.	Feb. 13	M.	3	Yes	Complete recovery.	
5.	Mar. 10	M.	4 mths.	Yes	Died 94 days after onset.	
6.	Mar. 23	F.	17	Yes	— Died 24 hours after onset.	
7.	Mar. 24	M.	1½	Yes	Died about 35 days after onset.	
8.	Mar. 24	F.	1	Yes	Complete recovery.	
9.	April 30	M.	1	Yes	Complete recovery.	
10.	May 5	F.	3	Yes	Died 61 days after onset.	
11.	June 1	M.	19	Yes	Died 40 days after onset.	
12.	June 21	F.	39	Yes	Died 15 days after onset.	
13.	June 21	M.	2	Yes	Complete recovery.	
14.	June 23	F.	12	Yes	Died 23 days after onset.	
15.	July 2	F.	2	Yes	Complete recovery.	
16.	July 2	M.	21	Yes	Died 16 days after onset.	
17.	July 13	M.	5 mths.	Yes	Died 20 days after onset.	
18.	July 13	M.	1	Yes	Complete recovery.	
19.	July 27	M.	2	No organisms found	Died 5 days after onset.	
20.	Oct. 7	F.	3	Yes	Died 45 days after onset.	
21.	Oct. 15	M.	47	Yes	Died 6 days after onset.	
22.	Oct. 25	M.	18	Yes	Died about 23 days after onset.	
23.	Dec. 13	F.	8	No examination	— Died within 24 hours of onset.	
24.	Dec. 13	F.	4 mths.	No examination	Died 32 days after onset.	
25.	Dec. 22	F.	37	Yes	N.H. Died 51 days after onset.	

Cases marked H. were removed to Hospital, N.H. to private Nursing Home, and others were treated at home.

The cases were treated as follows :—

	Cases.	Deaths.
General Hospital	12	9
Queen's Hospital	1	1
Women's Hospital	1	1
Children's Hospital	8	4
Private Hospital	1	1
At home by private practitioners	2	2

Of the 25 cases reported, 18 died giving a total mortality of 72%, while of the 22 cases in which the diagnosis was confirmed bacteriologically, the deaths numbered 15, giving a mortality in the notified cases of 68%.

The corresponding figures for the last six years are as follows :—

Year.	Total Cases.			Verified Cases.		
	Cases.	Deaths.	Death-rate percentage.	Cases.	Deaths.	Death-rate percentage.
1915	52	41	79	—	—	—
1916	29	19	65	13	9	69
1917	29	21	72	18	11	61
1918	16	10	62	7	4	57
1919	14	9	64	11	7	63
1920	25	18	72	22	15	68

ACUTE ANTERIOR POLIOMYELITIS.

Only one case of this disease was notified during 1920, the patient being a boy aged 5. He recovered without permanent Paralysis.

The record of cases for the last six years has been as follows :—

Year.	Cases Reported.	Completely Recovered.	Recovered with various Paralyses left.		Deaths.
			... 5	2	
1915	8	5	...	2	1
1916	19	7	...	9	3
1917	11	6	...	3	2
1918	4	2	...	2	0
1919	14	6	...	7	1
1920	1	1	...	0	0

ACUTE ENCEPHALITIS LETHARGICA.

During the year 1920 18 cases of this disease were reported, of whom 7 died, giving a mortality rate of 38.9% as against 11 cases with 5 deaths, a mortality of 45.5% in 1919.

Details of these cases are shown as follows :—

Case.	Date of Notification.	M. or F.	Age.	Result.
1.	Jan. 23	M.	17	H. Recovery, but left with severe mental depression.
2.	Feb. 2	F.	16	H. Died 24 days after onset.
3.	Mar. 5	M.	11	— Recovery, but has since died after operation for appendicitis.
4.	Mar. 24	F.	2	H. Recovery, but mentally deficient.
5.	April 28	M.	25	— Recovery, but temper is very irritable.
6.	May 5	M.	37	H. Recovery, but cross and irritable since illness.
7.	May 8	M.	59	— Recovery, but unable to collect thoughts and is cross and irritable.
8.	May 20	F.	6	H. Complete recovery—no sequelæ.
9.	June 10	F.	15	— Complete recovery—no sequelæ.
10.	June 18	F.	26	H. Left with mental trouble and paralysis of ocular and facial muscles.
11.	June 25	F.	13	— Died 16 days after onset.
12.	June 25	F.	50	— Died 51 days after onset.
13.	July 7	M.	41	— Died 15 days after onset.
14.	July 22	F.	21	— Complete recovery—no sequelæ.
15.	Aug. 19	M.	14	H. Died 11 days after onset.
16.	Sept. 16	F.	5	H. Complete recovery.
17.	Oct. 22	F.	43	H. Died 94 days after onset.
18.	Nov. 13	M.	10	— Still under treatment.

Cases marked H were removed to hospital, others were treated at home. As last year, the cases were scattered in all parts of the City, and in no case could any connection be found between any two of the cases to suggest possible infection from one to another.

BRONCHITIS AND PNEUMONIA.

During the year there were 1,066 deaths due to Bronchitis and 1,011 to Pneumonia. The number of cases of Pneumonia reported was 1,733, as compared with 1,739 in the previous year. The death-rates from both diseases are shown for Birmingham and England and Wales in the following table :—

DEATH-RATES FROM BRONCHITIS AND PNEUMONIA.

	BRONCHITIS.		PNEUMONIA.	
	Birmingham.	England and Wales.	Birmingham.	England and Wales.
1901	..	1.80	1.37	1.55
1902	..	1.64	1.32	1.46
1903	..	1.46	Average 1.11	Average 1.32
1904	..	1.76	1.62	1.24
1905	..	1.43	1.14	1.49
1906	..	1.38	1.04	1.44
1907	..	1.49	1.22	1.37
1908	..	1.47	Average 1.10	Average 1.22
1909	..	1.47	1.41	1.19
1910	..	1.24	0.96	1.30
1911	..	1.25	1.00	1.11
1912	..	1.26	1.08	1.04
1913	..	1.20	Average 1.06	Average 1.02
1914	..	1.26	1.27	1.08
1915	..	1.37	1.44	1.36
1916	..	1.29	1.25	1.06
1917	..	1.01	1.25	1.14
1918	..	1.22	Average 1.23	Average 1.65
1919	..	1.39	1.22	1.15
1920	..	1.17	—	1.06

It will be seen that the figures for Bronchitis and Pneumonia have fallen in Birmingham, and are now very nearly as low as the figures for the whole of England and Wales.

MALARIA, DYSENTERY, AND TRENCH FEVER.

During the year 1920 the notification of the above diseases was compulsory. There were 154 cases of Malaria reported, none of which were indigenous, all being secondary to attacks among soldiers who contracted the disease during the War. Similarly, 13 cases of Dysentery were reported, which were also secondary to attacks during the War. No case of Trench Fever was reported.

DISEASES OF ANIMALS COMMUNICABLE TO MAN.

(REPORT BY MR. BRENNAN DE VINE, F.R.C.V.S., VETERINARY SUPERINTENDENT.)

ANTHRAX.

During the year five cases of suspected Anthrax were reported and dealt with ; no case was confirmed. From 1916 to 1919 there was a great reduction in the number of cases in the country, this being explained by the reduced amount of foreign feeding cakes, manures, and hides received into the country. For the whole of the country for the year 1919 there were 234 cases of confirmed Anthrax, and in 1920 they rose to 459 cases.

GLANDERS AND FARCY.

There was one suspected case of Glanders in a horse which on examination was not confirmed. There has been no case of Glanders or Farcy in the City since 1916.

FOOT AND MOUTH DISEASE.

On the 27th December there was an outbreak of Foot and Mouth Disease in cattle in the lairages at the City Meat Market awaiting slaughter. Cases were detected in various parts of the City amongst fat animals which had been brought in from outside areas. All the diseased and in-contact animals, numbering 454, were slaughtered at the Central Meat Market on the 27th, 28th, and 29th December. Of these 390 were found affected in varying degrees with Foot and Mouth. Owing to the immediate slaughter of these animals there was not much time for the disease to develop, consequently on *post mortem* only a few cases of advanced lesions were found, the majority of the animals being only slightly affected. Owing to this outbreak the City was made a prohibited area by the Ministry of Agriculture. This prevented all movement of cattle into or out of the City, and for the time being reduced the fresh meat supply somewhat.

During the year there were 93 outbreaks of this disease in the country, and 11,373 animals were slaughtered as diseased or exposed to infection.

RABIES.

We have had no confirmed cases of Rabies in the City, though we were called upon to examine a number of cases of suspected Rabies in dogs and cats. Two of the suspected cases in the City were reported to the Ministry of Agriculture, but these were not confirmed. So far Birmingham has remained free from this disease and the Muzzling and Movement Restrictions Order has not been applied to this area. All suspected cases which are reported to the Department are retained and isolated in specially constructed kennels at Holliday Street Wharf.

During the year there were 42 confirmed cases of Rabies in dogs in the country, as against 150 in dogs and 5 in other animals during the preceding year.

PARASITIC MANGE.

The number of outbreaks of Mange in the City during the year was 56, affecting 66 horses. Of the 66 cases 13 were destroyed by their respective owners, who did not consider them worth the cost of treatment. Forty-nine were cured and 4 were still under treatment on the 31st December.

SWINE FEVER.

During the year 149 dead pigs were submitted for inspection : of these 17 cases were reported to the Ministry of Agriculture as being suspicious of Swine Fever, and 13 of these cases were confirmed. There continues to be a reduction in the number of outbreaks of Swine Fever in the City, as will be seen by the following table :—

1916.	1917.	1918.	1919.	1920.
36	33	19	11	13

SHEEP SCAB.

There were no cases of Sheep Scab in the City during the year.

TUBERCULOSIS.

The Tuberculosis Order is still in suspension, the disease not being a scheduled one at the present time. There were 2 cases of cows affected with tuberculosis of the udder found in the City dairies : these were both slaughtered.

OTHER SCHEDULED DISEASES.

Among the other scheduled diseases, namely, Rinderpest, Epizootic-lymphangitis, Bovine Pleuro-pneumonia, etc., there has been no case during the year.

The situation regarding the diseases of animals in the City has, during 1920, been satisfactory, and the number of cases continues low for the district.

CITY HOSPITALS.

The following statement shows the number of patients* treated last year in the City Hospitals :—

	Scarlet Fever.	Diphtheria.
Under treatment at beginning of year ..	770	170
Admitted during the year	3,652	1,376
Discharged during the year	3,824	1,119
Died during the year	89	153
Remaining at end of year	509	274

* In a certain number of cases the diagnosis was revised in hospital.

REPORT ON CITY HOSPITAL, LITTLE BROMWICH.

(By Dr. E. H. R. HARRIES, MEDICAL SUPERINTENDENT.)

I beg to submit to you a report on the work of this Hospital for the year ending December 31st, 1920. For the first four and a half months of the year under consideration Dr. D. M. Spring was the Medical Superintendent ; I succeeded him in the middle of May.

The year has been a very busy one for the Hospital, as will be seen from the large number of cases both of Scarlet Fever and Diphtheria treated in the Wards.

The figures are as follows :—

Scarlet Fever Cases.

Remaining December 31st, 1919	..	..	..	693
Admitted during year 1920	..	..	..	2,326
Discharged	..	..	..	2,699
Died	..	..	..	70
Remaining December 31st, 1920	..	..	..	250

The cases of Scarlet Fever treated have on the whole not been of a severe type.

Of the 70 deaths occurring among patients admitted for Scarlet Fever 4 were due to other causes, leaving a net total of 66.

Diphtheria Cases.

Remaining December 31st, 1919	..	..	..	185
Admitted during year 1920	..	..	..	1,378
Discharged	..	..	..	1,141
Died	..	..	..	153
Remaining December 31st, 1920	..	..	..	269

A large number of cases of Diphtheria admitted were of a severe type, especially in the first and last quarters of the year.

Of the 153 deaths occurring in patients admitted as Diphtheria 15 were due to other causes, leaving a net total of 138 ; 38 of these died within twenty-four hours of admission to Hospital.

A proportion of cases, both of Scarlet Fever and Diphtheria, were found to be suffering from other diseases, particularly Measles. One case was admitted as Measles, and 2 cases of Erysipelas were also taken into Hospital.

The total number of patients under treatment during the year was 4,585.

Bed Isolation.—Owing to the large number of cases received and the consequent pressure upon the available isolation wards for the reception of patients in whom the diagnosis was doubtful, and for cases of double or "cross" infection, it was decided to institute the system of "Bed Isolation," worked out some ten years ago by Dr. Rundle, of Fazakerley Hospital, Liverpool. "E" Ward was selected for this purpose, and opened on June 1st, 1920. We were fortunate in being able to utilise the services of a surgically-trained Sister—the whole system of course depending upon the maintenance of asepsis—and to pick suitable Nurses for the working of the ward.

From June 1st until the end of December (*i.e.*, seven months) 263 cases were treated in this Ward.

The cases received included many in whom the diagnosis upon which they were sent into Hospital was not confirmed after observation; children with parasitic skin infections in addition to a zymotic condition; children with double infections (*e.g.*, Scarlet Fever and Measles), and children sent from the Hospitals with surgical complications (*e.g.*, empyema).

A number of cases of Measles were admitted in the early catarrhal stage and successfully treated without "crossing," the diagnosis having been made on the presence of Koplik spots before the appearance of the exanthem.

Chicken Pox in an early stage did originate "cross" infection upon one occasion (but has subsequently been successfully treated). "Crossing" is the experience of the majority of observers with this disease, even when treated in glass cubicles.

The success of the whole system entirely depends upon the scrupulous observance of the rules laid down for the Nursing Staff. The fact that the Ward has been run so successfully reflects great credit upon the Sister in charge and her Nurses.

The Ward was intentionally arranged on somewhat different lines to the original one at Fazakerley (of which I was for a considerable time M.O. in charge) with a view to obtaining information on a point that has been raised by other observers, who are of the opinion that a good deal of the success obtained in working a Ward on the "Bed Isolation" system is due to the fact that patients act as mutual natural barriers to each other by reason of previous attacks of the common zymotic diseases. That is to say, a child in a cot may be protected from infection by another child in the Ward by reason of being placed between two adults who in childhood have had the common infections: who, therefore, are more or less immune, and who thus increase the area of the "barrier."

"E" Ward on both East and West side is arranged with cots along one wall and beds along the other. All the beds are consecutively numbered, and information is obtained as completely as possible of the previous diseases of each patient. In this way the ages and diseases of the patients under treatment on any given day can readily be mapped out, and the degree, if any, of natural barrier protection afforded by one patient to any adjacent patient can be ascertained.

Obviously the test of the system on the cot side of the Ward—the patients here being small children—will be more severe than on the bed side, where the patients are older children or adults.

The work of "E" Ward is still proceeding with great success and utility to the Hospital, and it is proposed to present a more detailed account of the work at a later stage—that is, when the Ward has been open for a year.

The more promising of the Probationer Nurses are sent for definite periods of training in this Ward in order that a reserve of Nurses initiated in the method may always be available.

Many structural alterations and improvements in the Wards, Home, and Laundry, held over on account of the war, have been completed during the year under consideration. The general efficiency of the Hospital has been greatly increased thereby.

The division of duties between a Steward and Clerk of Works—consequent upon the resignation of Mr. Thorley—has worked smoothly.

In common with practically all other Hospitals we have had considerable difficulty throughout the year in obtaining a sufficiency of suitable candidates for the Nursing Staff—this difficulty has been accentuated by the very large number of cases under treatment—consequently it was necessary for a long period to employ a number of private Nurses to augment the permanent Staff.

It has been possible very considerably to improve the housing conditions and to lighten the hours of labour of the Nurses.

I should like to express my appreciation of the loyalty and zeal of the whole Staff, working, as they have been at times, under unavoidable conditions of great pressure. To the Matron, Miss Cherrington, my thanks are especially due for the able and tactful manner in which she has coped with the difficulties arising from shortness of Staff.

My work has been rendered much easier by the constant consideration and support of the Committee.

REPORT ON LODGE ROAD HOSPITAL.

(BY DR. A. DUDLEY GILL, ACTING MEDICAL SUPERINTENDENT.)

I beg to submit a report on the work done at this Hospital for the year ending December 31st, 1920.

Number of cases admitted as Scarlet Fever	1,177
Number of cases admitted as Diphtheria	2
Number of cases died of Scarlet Fever, etc.	20
Number of cases died of Diphtheria	1

This Hospital was re-opened on January 23rd, 1920, for the admission of cases of infectious disease.

The mortality based on the number of admissions .. 1.7%

Although the Hospital was opened for the admission of cases of Scarlet Fever only, it is worthy of note that a large number of Scarlet Fever cases presented severe Diphtheritic lesions also.

The usual complications of these diseases were encountered and treated.

The one death due to Diphtheria only was of a small child who was admitted moribund; it was a case of Laryngeal Diphtheria, and although tracheotomy was immediately performed, the child died a few days afterwards of Septic Broncho-pneumonia.

CROSS INFECTION.

Cross infection has been comparatively slight—chiefly Measles and Chicken Pox. These cases were immediately isolated, and they were very soon well in hand. No death ensued from them.

CORRECTED DIAGNOSIS.

In 21 cases admitted, patients were found to be suffering *not* from Scarlet Fever but from the following diseases :—

Diphtheria	3 cases.
Measles	4 "
Relaxed Sore Throat	2 "
Tuberculous Meningitis	1 "
Influenza and Broncho-pneumonia	1 "
Bronchitis	1 "
Broncho-pneumonia	1 "
Chicken Pox	1 "
Tonsilitis	4 "
Erythema	3 "

STAFF.

It is with much regret I have to place on record the much lamented death of the late Medical Superintendent, Dr. David Mitchell.

Two other deaths have occurred on the Staff during the year 1920 :—

- (1) Sister Jones, who died after a four days illness of Heart Failure secondary to Rheumatic Fever.
- (2) Probationer Nurse Murphy, who died of Influenza after a week's illness.
This Nurse had only been in the Hospital service for two weeks.

Nursing Staff.	Domestic Staff.
Scarlet Fever 4 cases.	Scarlet Fever 1 case.
Diphtheria 1 "	Tonsilitis 3 "
Measles 1 "	
Chicken Pox 3 "	
Appendicitis (operation) .. 1 "	
Injury to finger 1 "	
Tonsilitis 7 "	

The Medical Superintendent (Dr. W. W. Newton) in December, 1920, contracted Scarlet Fever.
All the above patients have made satisfactory recoveries.

WORKS.

No structural alterations have been carried out, though several of the Wards and portions of the administrative block have been cleaned and painted.

DISINFECTION.

The articles disinfected after infectious diseases were as follows:—Beds, 6,629; mattresses, 1,808; counterpanes, 3,463; blankets, 17,543; sheets, 2,469; bolsters, 2,717; pillows, 7,083; garments, 5,568; boots, 109; carpets, 429; and sundries, 7,175.

HOUSING.

It has been impossible to take action during the year 1920 under the Housing of the Working Classes Act in regard to areas or individual houses, because every available artisan dwelling has been occupied and the tenants could not be turned out for the carrying out of either demolition or substantial repairs. The most important feature in regard to house accommodation in Birmingham during the year has been the extraordinarily slow recovery which is being made in the provision of new houses.

In the following table are set out the numbers of new houses erected within the area of Greater Birmingham per 100,000 of the population during each year since 1901:—

				447 per 100,000
1901	..	..	..	447
1902	..	..	..	470
1903	..	..	..	483
1904	..	..	..	336
1905	..	..	..	316
1906	..	..	..	392
1907	..	..	..	409
1908	..	..	..	374
1909	..	..	..	318
1910	..	..	..	230
1911	..	..	..	149
1912	..	..	..	130
1913	..	..	..	178
1914	..	..	..	158
1915	..	..	..	71
1916	..	..	..	54
1917	..	..	..	38
1918	..	..	..	1
1919	..	..	..	5
1920	..	..	..	72

From this it will be seen that private enterprise was crippled apparently in the year 1903, and that since then up to the commencement of the War this main source of workmen's dwellings diminished to a little more than one-third of what it was in 1901.

Very great efforts have been made by the Government and by Local Authorities to provide houses under the extraordinarily difficult conditions which have existed, but for one reason or another all these efforts have been comparatively unsuccessful.

During recent years much fresh legislation has been brought into operation in regard to housing, with a result that, unless some very definite action is taken, confidence will not be restored among those investors who desire to put their money into house property rather than into something more speculative. House property in Birmingham has been a means of investment for small owners in the past, and it is exceedingly desirable that the confidence of prospective owners should be restored and that house property should be erected in liberal measure to accommodate both the people who at the present time have no houses of their own to live in and the still larger number of people who are living under bad housing conditions because they cannot get houses of a reasonably good character. It is exceedingly desirable to encourage the occupiers of small houses to own their own dwellings. The cost, however, at the present time is prohibitive, and all the good work which has been done in past years is at present at a standstill. The Municipal Savings Bank has advanced £213,381 to 762 small owners for the purchase of their own houses during the year 1920. While this is so, it is unlikely that cottage property will be taken up as an investment until very definite legislation gives it a good security.

GENERAL SANITARY INSPECTORS' WORK.

Number of visits and revisits paid :—

Houses inspected under Housing Regulations .....	..	..	..	..	715
Revisits paid under Housing Regulations .....	..	..	..	..	658
Special Housing Enquiries (Selly Oak, St. Paul's, and Quinton) .....	..	..	..	..	10,615
Infectious Diseases .....	..	..	..	..	17,044
Nuisances or Complaints .....	..	..	..	..	26,900
Work ordered .....	..	..	..	..	34,097
Work in progress .....	..	..	..	..	10,172
Inspection of Dirty Courts .....	..	..	..	..	2,201
Manure Receptacles .....	..	..	..	..	768
Smoke or Water Tests .....	..	..	..	..	1,036
Tents, Vans and Sheds .....	..	..	..	..	42
Offensive Trades .....	..	..	..	..	35
Ice Cream Vendors .....	..	..	..	..	647
Rats Order .....	..	..	..	..	384
Calls on Owners or Agents .....	..	..	..	..	5,166
Other Purposes .....	..	..	..	..	2,835
Total .....	..	..	..	..	113,315

Nuisances, etc., reported :—

Houses to be disinfected after Scarlet Fever .....	..	..	..	..	4,946
" " " " Diphtheria .....	..	..	..	..	1,510
" " " " Typhoid Fever .....	..	..	..	..	290
Repairs to Houses .....	..	..	..	..	20,644
Houses to be cleansed .....	..	..	..	..	2,517
Houses to be provided with better ventilation .....	..	..	..	..	333
Houses to be provided with separate water supply .....	..	..	..	..	35
Cases of overcrowding to be remedied .....	..	..	..	..	48
Houses to be provided with Damp Courses .....	..	..	..	..	371
Water to be removed from Cellars .....	..	..	..	..	527
Spouting to be repaired or disconnected .....	..	..	..	..	5,867
Rain Water Cisterns to be discontinued or abolished .....	..	..	..	..	346
Ashpit Privies to be converted to Water Closets .....	..	..	..	..	89
Pan Privies to be converted to Water Closets .....	..	..	..	..	107
Privies and Closets to be limewashed .....	..	..	..	..	210
Water Closets to be repaired or reconstructed .....	..	..	..	..	4,553
Additional Water Closets to be provided .....	..	..	..	..	23
Ashplaces to be repaired or limewashed .....	..	..	..	..	626
Solripes to be repaired or removed .....	..	..	..	..	69
Urinals to be put in order or closed .....	..	..	..	..	96
Drains to be relaid or repaired .....	..	..	..	..	1,402
Drains to be opened and cleansed .....	..	..	..	..	7,855
Gully Traps to be provided .....	..	..	..	..	235
Interception Traps to be provided on main drains .....	..	..	..	..	72
Premises to be supplied with additional drains .....	..	..	..	..	197
Drains in cellars to be disconnected or abolished .....	..	..	..	..	7
Sink Bend Pipes to be repaired or affixed .....	..	..	..	..	1,356
Sanitary Sinks to be provided .....	..	..	..	..	625
Yards to be paved .....	..	..	..	..	92
Yards to be repaired .....	..	..	..	..	1,044
Courts or Yards to be cleansed by Tenants .....	..	..	..	..	218
Houses to be cleansed by Tenants .....	..	..	..	..	48
Wash Houses to be repaired or limewashed .....	..	..	..	..	1,392
Keeping of fowls to be discontinued .....	..	..	..	..	97
Nuisances from swine and swine stybes abated .....	..	..	..	..	47
Accumulation of rubbish, manure, etc., to be removed .....	..	..	..	..	281
Manure receptacles to be provided or repaired .....	..	..	..	..	63
Dangerous premises to be reported to City Surveyor's Department .....	..	..	..	..	740
Defective Fittings to be reported to Water Department .....	..	..	..	..	1,796
Other Work to be done .....	..	..	..	..	28
Total .....	..	..	..	..	60,802

SANITARY NOTICES ISSUED.

SPECIAL COURTYARD INSPECTORS.

No. of houses in courtyards visited or revisited	..	..	..	..	211,965
W.C.'s locked up at time of visit	..	..	..	..	52,050
W.C.'s not locked	..	..	..	..	44,613
W.C.'s found obstructed	..	..	..	..	2,801
W.C.'s found dirty	..	..	..	..	11
Defective W.C.'s reported	..	..	..	..	466
Obstructed drains reported	..	..	..	..	390
No. of additional ashbins required	..	..	..	..	6,615
No. of ashbins found in good condition	..	..	..	..	59,682
No. of defective ashbins	..	..	..	..	3,630
Other defects reported	..	..	..	..	398

WORK DONE BY COURT CLEANSING STAFF.

Courts cleansed by staff and paid for	..	..	..	..	..	13,018
Courts cleansed free of charge	..	..	..	..	..	6,619
Houses stripped	..	..	..	..	..	326
W.C.'s examined	..	..	..	..	..	89,006
W.C.'s opened	..	..	..	..	..	9,738
W.C.'s cleansed (swilled)	..	..	..	..	..	65,412
Pan privies cleansed (swilled)	..	..	..	..	..	9
Ash places cleansed (swilled)	..	..	..	..	..	24,810
Drain traps cleansed	..	..	..	..	..	136,242
Drains freed from obstruction	..	..	..	..	..	5,712

COMMON LODGING HOUSES.

No new lodging houses were registered during the year, and 2 were closed, leaving 32 such houses in the City, having accommodation for 2,178 lodgers. The work done in connection with them is shown below:—

Visits by day 1,033
 Visits by night 132

Work ordered :—

Windows to be opened	..	..	..	..	..	253
Walls, floors, roofs, etc., to be repaired	..	..	..	..	..	80
Water-closets to be provided or repaired	..	..	..	..	..	45
Water-closets to be cleansed or unstopped	..	..	..	..	..	401
Water-closets to be limewashed	..	..	..	..	..	253
Ashplaces to be cleansed	..	..	..	..	..	91
Ashplaces to be limewashed	..	..	..	..	..	70
Ashbins to be provided	..	..	..	..	..	2
Drains or yards to be repaired or cleansed	..	..	..	..	..	255
Houses to be limewashed	..	..	..	..	..	73
Floors, passages and stairs to be cleansed	..	..	..	..	..	420
Removal of rubbish	..	..	..	..	..	58
Sinks to be repaired	..	..	..	..	..	8
Wash basins to be provided	..	..	..	..	..	22
Fire buckets to be provided	..	..	..	..	..	30
Bed clothing to be provided (sets)	..	..	..	..	..	518
New beds provided	..	..	..	..	..	204
Bedsteads provided or repaired	..	..	..	..	..	204
Beds cleansed	..	..	..	..	..	49
Washplaces to be cleansed	..	..	..	..	..	69
Wash-basins, etc., to be put in order	..	..	..	..	..	191
Water taps to be provided or repaired	..	..	..	..	..	37
Other defects remedied	..	..	..	..	..	330

HOUSES SUB-LET IN LODGINGS.

The work done in regard to these houses is indicated in the next statement:—

Houses registered during year	15
Houses removed from register	13
Houses on the register at end of year	504
Lodgers allowed	3,580
Visits paid to registered houses	6,067

CONTRAVENTIONS REMEDIED.

	CONTINUATION OF DISEASES	
Overcrowding	...	21
Repairs to houses	...	153
Rooms not swept daily	...	93
Passages not swept	...	3
Stairs not swept	...	15
Bedding to be cleansed	...	3
Houses to be cleansed (walls and ceilings)	...	323
Drains, etc., obstructed	...	128
Water-closets to be repaired	...	63
Windows not opened	...	21
Rubbish removed from yards and cellars	...	16

CANAL BOATS REPORT.

PUBLIC HEALTH DEPARTMENT,

January 27, 1921.

GENTLEMEN,

In compliance with Section 3 of the Canal Boats Act, 1884, I beg to submit to you the annual report of the work done by this Department during the year 1920 under the Canal Boats Acts, 1877 and 1884, and the regulations under these Acts.

The work of Canal Boat Inspection has been performed by Inspector G. W. H. Childs, who, in addition to other duties also acts as Inspector of Common Lodging Houses in the City, and receives a salary for the joint appointment of 55s. per week and 68s. 7d. per week bonus, together with uniform and cycle allowance.

INSPECTION OF BOATS.

During the year 1920 the number of boats inspected was 930, and these inspections were distributed over the year as follows:—

During the first quarter of the year 285 boats were inspected.

“ “ second	“ “	247	“ “	“ ”
“ “ third	“ “	224	“ “	“ ”
“ “ fourth	“ “	174	“ “	“ ”
			930	

These 930 boats were registered to accommodate 3,076½ adults, and were found when inspected to be occupied by 1,211 men, 676 women, and 569 children, a total of 2,456 individuals.

The following table shows the number of boats inspected during the last five years, giving the number of adults the boats were registered to carry and the actual number of persons occupying them when inspected:—

Year.	Number of Boats Inspected.	Registered to accommodate (adults).	Actually occupied by			Total.
			Men.	Women.	Children.	
1916	1,072	3,647 $\frac{1}{2}$	1,302	715	957	2,974
1917	973	3,300 $\frac{1}{2}$	1,144	722	968	2,834
1918	868	3,017	1,027	674	743	2,444
1919	890	2,975 $\frac{1}{2}$	1,189	566	553	2,308
1920	930	3,076 $\frac{1}{2}$	1,121	676	569	2,366

Of the above 569 children 319, or 56 per cent. of the total, were of school age, while 250, or 44 per cent., were under 5 years of age.

In the months of April to August during a special investigation regarding the number of children carried on the boats and their conditions with regard to educational facilities, it was found that out of 78 families investigated, 31 of these had homes on shore which they occasionally occupied, while in 47 cases there was no home other than the boat.

Of the 930 boats inspected during the year, it was found that 895, or 96.2 per cent. of the total, were in good condition and complying with the Acts and regulations, while in 35, or 3.8 per cent., various infringements were found. These are classified as follows :—

Boats found with one infringement each	4	Total	4 infringements.
" " " two "	8	16	"
" " " three "	4	12	"
" " " four "	17	68	"
" " " five "	2	10	"
	—	—	—
	35	110	"
	—	—	—

Complaint notes were served in every case on the owners.

During the year certificates were returned by owners duly signed by the Canal Boat Inspector, showing that 105 complaints had been remedied. The following table shows the number and character of the infringements found and remedied during the year :—

Infringements referring to.	Outstanding and brought forward from 1919.	Found during 1920.	Remedied during 1920.	Carried forward to 1921.
Boats not registered	1 ..	3 ..	3 ..	1
Certificates not produced	2 ..	3 ..	4 ..	1
Certificates not identifying boat	1 ..	—	—	1
Repairs	8 ..	25 ..	20 ..	13
Painting	14 ..	24 ..	25 ..	13
Marking	12 ..	23 ..	25 ..	10
Leaks	6 ..	21 ..	17 ..	10
Dirty cabins	2 ..	2 ..	2 ..	2
Separation of sexes	— ..	4 ..	4 ..	—
Overcrowding	— ..	5 ..	5 ..	—
	—	—	—	—
	46 ..	110 ..	105 ..	51 ..
	—	—	—	—

No legal proceedings have been taken in any case during the year.

REGISTRATION OF BOATS.

During 1920 13 boats have been registered in Birmingham and 5 registrations have been cancelled, leaving a total of 478 boats on the register as against 470 on December 31st, 1919.

The registrations are shown as follows :—

New Motor Boats	.. ..	.. ..	.. ..	3
New Ordinary Boats	.. ..	.. ..	.. ..	3
Re-registration of Motor Boats	.. ..	.. ..	.. ..	1
Re-registration of Ordinary Boats	.. ..	.. ..	.. ..	6
	—	—	—	—
Total	.. ..	.. ..	.. ..	13
	—	—	—	—

All the re-registrations were necessitated by change of ownership; the motor-boat was previously registered at Brentford, and of the ordinary boats two were previously registered in Birmingham and one each at Daventry, Towcester, Uxbridge, and Worcester.

The number of boats on the Birmingham register for the past five years has been :—

December 31st, 1916—Boats on Register	.. ..	465
1917	.. ..	464
1918	.. ..	465
1919	.. ..	470
1920	.. ..	478

The 478 boats on the register on December 31st, 1920, comprise the following :—

Ordinary Boats	.. ..	.. ..	.. ..	430
Steamers	.. ..	.. ..	.. ..	21
Motor Boats	.. ..	.. ..	.. ..	27
	—	—	—	—
	478			

INFECTIOUS DISEASES.

No case of infectious disease has been reported from, or found on, any of the boats in the City during the year 1920.

I am, Gentlemen, your obedient servant,

T. W. BEAZELEY, M.B., D.P.H.,
Assistant Medical Officer of Health.

MILKSHOPS AND DAIRIES.

Particulars as to the inspection of milkshops and dairies are given below:—

No. of milkshops on register	..	..	..	..	3,686
No. of dairies on register	..	..	..	..	8
No. of purveyors on register	..	..	..	..	412
Visits to milkshops	..	..	..	..	4,461
Visits to dairies	..	..	..	..	46
Visits to purveyors	..	..	..	..	269
Visits to railway stations	..	..	..	..	72
Milk vessels examined	..	..	..	..	8,440
Milkshops limeashed	..	..	..	..	80
Sanitary defects remedied	..	..	..	..	148
Cases of infectious disease dealt with	..	..	..	..	82
New milkshops registered	..	..	..	..	157
New purveyors registered	..	..	..	..	58

INSPECTION OF MEAT, FISH, FRUIT, ETC.

(REPORT MADE BY MR. BRENNAN DE VINE, F.R.C.V.S., VETERINARY SUPERINTENDENT.)

In addition to the Public Abattoir there were 157 private slaughter-houses in the City at the end of 1920. The number in 1914 and 1920 is shown below:—

		1914.	1920.
Registered Slaughter-houses	..	101	89
Licensed Slaughter-houses	..	78	68
		<hr/> 179	<hr/> 157

Eight Inspectors are employed in the work of inspecting slaughter-houses, markets, and shops. They paid 8,873 visits to slaughter-houses last year, in addition to the systematic visits paid to markets and shops.

The amount of food seized or given up voluntarily as unfit for use was as follows:—

Bad Meat.

Voluntarily surrendered	..	..	..	..	3,371 lots.
Seized by Inspectors	..	..	..	..	—
Weight destroyed	..	..	..	..	357 tons.
Persons prosecuted	..	..	..	..	—
Penalties inflicted	..	..	..	..	—

Bad Fish, Poultry, etc.

Voluntarily surrendered	..	..	..	..	1,905 lots.
Seized	..	..	..	..	1
Weight destroyed	..	..	..	..	403 tons.
Persons prosecuted	..	..	..	..	1
Penalties inflicted	..	..	..	..	4s. costs.

Bad Fruit, etc.

Weight destroyed	37 tons.
------------------	----	----	----	----	----------

SHOPS ACTS, 1912, 1913, AND 1920.

The administration of the Shops Acts has been carried out during the year on similar lines to former years, and the work has been done by two whole-time inspectors, instead of four as formerly.

The total number of visits paid to shops during the year 1920 is detailed as follows:—

Shops observed without visiting	..	..	..	14,819
Systematic visits to shops	..	..	..	7,982
Re-visits	..	..	..	2,527
Special visits	..	..	..	418
				<hr/> 25,746

The same practice was followed as in previous years of drawing the attention of the shopkeeper verbally to any infringement of the Act found at these visits, and if, on a subsequent visit, the infringement had not been remedied, of sending a formal printed notice. Such formal notices were sent in 108 cases, and are tabulated as follows :—

Not exhibiting early closing day notice	24
Not exhibiting exempted trades notice	33
Assistant's weekly half-holiday notice not exhibited or in proper order	21
Not exhibiting young persons' notice	3
Employing Assistants after 1.30 p.m.	5
Not closing shop at 1 p.m.	19
Not allowing proper meal times to Assistants	3
	108

These contraventions were generally remedied after the verbal warning or the receipt of the formal notice, but six summonses were issued for non-compliance with the notice, and the cause and result are shown as follows :—

- For not closing on the usual half-holiday, one defendant was fined £5 in each of two cases.
- For not closing on the usual half-holiday, two defendants were fined £1 in each case.
- For selling non-exempted goods on early closing day, one defendant was fined 10s.
- For not properly filling up Assistants' half-holiday list, one defendant was discharged on payment of costs.

In addition to the above prosecutions, summonses were also issued on 31 shopkeepers for not closing for the usual half-day on Saturday, December 18th. On these cases coming into Court, one was taken as a test case, and the charge was dismissed by the Bench on the ground that " Saturday, December 18th, was, in the case of these Saturday closing shops, the half-holiday immediately preceding the Bank Holiday on December 27th." The summonses in the 30 other cases were thereupon withdrawn, but an appeal has been lodged against the decision of the magistrates in this case.

CLOSING AND EXEMPTION ORDERS.

There has been no change since the last report in the number of Closing and Exemption Orders in force in the City.

Under these Orders, pawnbrokers and hay and corn dealers' shops are obliged to close on a specified day in each week, and Wednesday (or as an alternative, Saturday) has been the day fixed for this closing ; while grocers' shops and photographic studios have exemption from the necessity of closing for a weekly half-holiday.

SHOPS ACT, 1913.

This Act, which is applicable only to premises used for the sale of refreshments, and is an amending Act to the Shops Act, 1912, regulates the hours of employment, hours of mealtimes and holidays of assistants. This Act may be adopted in place of the 1912 Act, but if so adopted, its provisions must remain in force for a period of twelve months and can only be withdrawn at the expiration of the first or any succeeding twelve months after its adoption. At the present time there are four establishments in the City which are working under the provisions of the Act.

SHOPS ACT, 1920.

This Act is an extension of the original Shops Acts, 1912 and 1913, and continues, until December 31st, 1921, a provision which has previously been in force under the Defence of the Realm Regulations, requiring all shops, with certain specified exemptions, to close at 8 p.m. on all evenings of the week and at 9 p.m. on Saturdays.

FACTORIES AND WORKSHOPS.

I. INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

(Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.)

PREMISES. (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Prosecutions. (4)
Factories (including Factory Laundries) ..	1,238	192	1
Workshops (including Workshop Laundries) ..	4,800	208	—
Workplaces (other than Outworkers' premises included in Part 3 of this Report) ..	432	14	—
Total	6,470	414	1
Revisits paid	2,742	—	—

II. DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

PARTICULARS. (1)	Number of Defects.			Number of Prosecutions. (5)
	Found. (2)	Remedied. (3)	Referred to H.M. Inspector. (4)	
Nuisances under the Public Health Acts :—				
Want of cleanliness	801	801	—	—
Want of ventilation	12	12	—	—
Overcrowding	4	4	—	—
Want of drainage to floors	1	1	—	—
Other nuisances	571	568	—	1
Sanitary accommodation—				
Insufficient	76	76	—	—
Unsuitable or defective	934	926	—	—
Not separate for sexes	59	58	—	—
Offences under the Factory and Workshop Act :—				
Illegal occupation of underground bakehouse (s. 101)	—	—	—	—
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)	—	—	—	—
Other offences (excluding offences relating to outwork which are included in Part 3 of this Report)	—	—	—	—
Total	2458	2446	—	1

III. HOME WORK.

OUTWORKERS' Lists, SECTION 107.

OUTWORK IN UNWHOLE-SOME PREMISES, SECTION 108.

NATURE OF WORK	Lists received from Employers.				Prosecutions.				Prosecu-tions Sections 109, 110	Orders made (§. 110).		
	Sending twice in the year.		Sending once in the year.		Outworkers.	Work-men (4)	Lists.	Outworkers.				
	Lists.	Con-tractors. (3)	Work-men (4)	Lists. (5)								
Wearing apparel—(1) making, etc. (2) cleaning and washing	314	817	1218	46	93	130				3		
Household linen												
Lace, lace curtains and nets												
Curtains and furniture hangings												
Furniture and upholstery												
Electro-plate												
File making												
Brass and brass articles												
Fur pulling												
Cables and chains												
Anchors and grapnels												
Cart gear												
Locks, latches and keys												
Umbrellas, etc.												
Artificial flowers												
Nets, other than wire nets												
Tents												
Sacks												
Racquet and tennis balls												
Paper, etc., boxes, paper bags												
Brush making												
Pea picking												
Feather sorting												
Carding, etc., of buttons, etc.												
Stuffed toys												
Basket making												
Chocolate and sweetmeats												
Total		461	1050	3698	73	110	344	626		16		

IV. REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year 4,854

V. OTHER MATTERS.

		Number.
Matters notified to H.M. Inspector of Factories:—		
Failure to affix Abstract of the Factory and Workshop Acts (s. 133, 1901)	.. .. .. .. ..	8
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Acts (s. 5, 1901)	Notified by H.M. Inspector	371
Other	Reports (of action taken) sent to H.M. Inspector	348
Underground bakehouses (s. 101):—		—
Certificates granted during the year		—
In use at the end of the year		5

HEALTH VISITORS' WORK.

(By BLANCHE GARDINER, B.A., SUPERINTENDENT OF HEALTH VISITORS.)

During the year 1920 the number of Women Health Visitors (General, Infant-Welfare, and Tuberculosis) averaged about 87, practically the same as in the previous year, viz., 19, who were engaged in General Health Visiting; 14 in Tuberculosis Visiting, and the remainder dealing with Maternity and Infant Welfare.

The work done in connection with Tuberculosis and Maternity and Infant Welfare is dealt with elsewhere, but that of the General Health Visitors is indicated to some extent by the following table, which shows also (for comparison) the figures for 1917, 1918, and 1919:—

PRIMARY VISITS :—		1917	1918	1919	1920
Systematic	2,488	1,870	3,508	3,821	•
Births	6,522	4,891	3,589	2,767	
Ophthalmia Neonatorum	81	103	79	119	
Diarrhoea Deaths	136	141	44	53	
Measles	13,935	4,756	13,284	6,154	
German Measles	403	352	566	358	
Pneumonia	—	—	771	1,733	
Chicken-Pox	2,754	2,087	2,277	3,204	
Whooping Cough	2,044	3,596	843	2,764	
Mumps	1,619	5,676	738	698	
Influenza	—	—	1,301	327	
Ringworm	14	19	13	8	
Scabies	1,327	1,359	1,153	981	
Impetigo	202	135	159	224	
Vermilion	85	35	17	42	
Blight	58	26	25	9	
Unclassified School Cases—e.g., Colds, Coughs, Sore Throats, Bronchitis, Swollen Glands, Sores, Insufficient Clothing, etc.	2,927	3,802	3,277	2,833	
Schools	280	1,086	273	255	
Reported Overcrowding	16	13	5	5	
Health Talks	12	19	25	23	
Country Holiday Inspections	15	28	21	24	
Other Visits (not included in above)—e.g., Cases reported by various Societies, Hospitals, Individuals, etc., Complaints by Householders, Neighbours, etc. Visits to Doctors, Clergymen, etc., etc.	6,030	9,222	6,253	5,287	
Total	40,948	39,216	38,221	31,739	
RE-VISITS	14,945	14,200	13,985	15,501	
USELESS VISITS (i.e., Out, Removed, etc.)	7,092	6,938	6,652	5,685	
Grand Total	62,985	60,354	58,858	52,925	

Scabies. The decrease in the number of Scabies cases (reported by the Schools, etc., and visited in the homes), which was noted in the year 1919 (as compared with the years 1918 and 1917), was still more marked in 1920, and the figures also corroborated the general opinion of the Health Visitors as to this diminution.

Seventy-two tickets for free baths at the Skin Hospital were given during the year.

Pneumonia. The Health Visitors still continued to visit the homes in which notified cases occurred, and rendered help where necessary in the procuring of milk, coal, and more especially the assistance of the District Nurses (who nursed 267 Pneumonia cases during the year). In those instances where the case had not been notified (or did not reach the Health Visitor) until after the death of the patient, obviously nothing useful could be done by the Health Department.

Births and Ophthalmia Neonatorum. The only infants visited by the General Health Visitors were those whose births occurred outside the Maternity and Infant Welfare Centre areas (with the exception of one Centre). Thus 11 of the General Health Visitors visited 2,767 "births," and of the total number (444) of Ophthalmia Neonatorum cases these Visitors dealt with 119 and the Infant Welfare Visitors with the remaining ones.

The Milk (Mothers and Children) Order, 1918. The provision of milk at reduced charges (of 8d. and 4d. per quart), which was started tentatively in November, 1919, was continued in 1920 from January (when the ordinary retail price was 1s. per quart) until the end of May (by which time it had fallen gradually to 8d. per quart). The quantity allowable was the same as stated in last year's report, and the amount of reduction in price depended on the financial circumstances of the applicant.

Special cards of inquiry were used by the Visitors, and cards of authorisation were given to the milk dealers.

From January to May, 1920:—

Total number of applications	..	..	..	..	838
Number of applications disallowed	..	..	..	..	230
Number of applications allowed	..	..	..	..	608

Of the 608 applicants, milk at reduced rate was required:—

By 226 for 1 month only.

By 382 for 2 or more months (up to 5 months).

At the Royal Sanitary Institute Congress, held in Birmingham in July, a joint paper was written by some of the Visitors, and was read and discussed at the Conference of Health Visitors, and printed in full in the Journal of the Royal Sanitary Institute, the subject being "The Lonely, Incapacitated Aged Poor." The plight of these is often extremely pitiful, and is one of the most difficult problems with which the Health Visitors have to deal.

The Congress afforded the Visitors a welcome opportunity of hearing and meeting experts on various health subjects, and the useful interchange of ideas and experiences. This had a revivifying effect on those for whom long years of health visiting, with its many irritating unpleasantries (both mental and physical), might have tended to dull the keen edge of their interest. Moreover, it was impressed on the minds of many Authorities that the health of the Health Visitor is of no less importance than that of those whom she visits, and that for the Health Visitors' health to be allowed to suffer is uneconomic and illogical.

TABLE I.
Vital Statistics of Whole District during 1920 and previous Years.

Year. 1	Population estimated to middle of each year. 2	BIRTHS.				Transferable Deaths.				NETT DEATHS BELONGING TO THE DISTRICT.			
		Uncorrected Number. 3		Nett. Number. 4		Total Deaths Registered in the District. 5		Non-residents registered in the District. 8		Under 1 year of Age. 10		At all Ages. 13	
		Rate. 5	Number. 6	Rate. 7	Number. 8	Rate per 1,000 Nett Births. 11	Number. 10	Rate per 1,000 Nett Births. 11	Number. 12	Rate. 13			
1901 ..	760,989	?	23,866	31.4	14,089	18.6	?	?	?	4,205	176	13,290	17.5
1902 ..	768,757	?	24,246	31.2	12,973	16.7	?	?	?	3,503	144	12,650	16.3
1903 ..	776,604	?	23,956	30.9	12,433	16.0	?	?	?	3,525	147	12,224	15.8
1904 ..	784,532	?	24,260	31.0	14,047	17.9	?	?	?	4,346	179	13,882	17.7
1905 ..	792,540	?	22,939	29.0	12,132	15.3	?	?	?	3,224	141	11,948	15.1
1906 ..	800,631	?	23,484	29.4	12,983	16.2	?	?	?	3,682	157	12,737	15.9
1907 ..	808,803	?	23,233	28.8	12,567	15.6	?	?	?	3,084	133	12,356	15.3
1908 ..	817,060	?	23,986	29.1	12,732	15.5	?	?	?	3,124	130	12,396	15.3
1909 ..	825,400	?	22,555	27.4	12,573	15.3	?	?	?	2,727	121	12,398	15.1
1910 ..	833,826	?	22,288	26.8	11,200	13.5	?	?	?	2,570	115	11,001	13.2
1911 ..	842,337	?	21,975	26.1	12,760	15.2	?	?	?	3,298	150	12,623	15.0
1912 ..	850,947	22,186	22,168	26.1	12,131	14.3	338	212	2,470	111	12,005	14.1	
1913 ..	859,644	23,858	23,812	27.3	13,116	15.0	362	208	3,070	129	12,962	14.9	
1914 ..	862,534	23,268	23,207	26.4	13,115	14.9	346	257	2,839	122	13,026	14.8	
1915 ..	891,234	21,217	21,187	23.8	12,967	14.5	448*	357	2,490	118	12,816	14.4	
1916 ..	895,678	20,663	20,618	23.1	12,288	13.7	603*	416	2,142	104	12,081	13.5	
1917 ..	900,000	17,681	17,706	19.7	11,222	12.5	569*	591	1,791	101	11,774	12.6	
1918 ..	870,000	16,932	16,840	19.4	13,334	15.4	741*	582	1,674	99	13,175	15.2	
1919 ..	910,000	19,468	19,335	20.9	12,180	13.2	585	405	1,630	84	12,000	13.0	
Averages for years 1901-1919		?		22,193	26.7	12,676	15.2	?	?	2,916	130	12,476	15.0
1920 ..	910,000	25,276	25,069	27.6	11,664	12.9	588	333	2,072	83	11,409	12.6	

Rates in columns 5, 7, and 13 calculated per 1,000 of estimated population.

Total population at all ages at Census of 1911, 840,202. Area of District in acres, 43,637. Number of inhabited buildings, 177,030. Average Number of Persons per house, 4.7.

* Including all members of the Military and Naval Forces, whether residents of Birmingham or not.

TABLE II.

Causes of, and Ages at, Death during the Year ending January 1st, 1921.

TABLE II.—*continued.*

CAUSE OF DEATH.	AGES.														Males	Fe-males	Per-sons.			
	0-	1-	2-	3-	4-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75-	85-				
Chronic Rheumatism	1	1	4	6	14	7	1	10	24	34
Gout	—	1	—	2	1	—	4	—	4	
Scurvy	1	1	1	1	1	2	4	6	12	21	17	6	1	2	1	3
Diabetes	2	—	4	6	1	—	—	—	—	—	
Exoph. Goitre	2	—	1	2	1	—	—	—	1	12	13	
Addison's Disease	2	—	1	2	1	—	—	—	2	4	6	
Leucocy., Lymphadenoma	2	1	—	1	4	3	3	1	1	—	11	5	16	
Anæmia, Chlorosis	2	—	—	—	1	1	—	1	2	6	9	8	4	—	17	17	34	
Other General Diseases	...	4	1	—	—	2	—	—	—	1	—	—	—	—	—	—	3	5	8	
Alcoholism	—	2	—	—	—	—	—	2	—	2	
Chronic Lead Poisoning	—	—	—	1	—	—	—	1	—	1	
Other Poisonings (occupational)	—	—	—	—	—	—	—	—	—	—	
Ditto do. (not occupational)	—	—	—	—	—	—	—	—	—	—	
Encephalitis Lethargica	2	1	—	—	—	1	1	—	—	—	—	2	3	5	
Encephalitis	—	—	2	2	4	4	1	1	—	2	3	13	16		
Cerebro-spinal Fever	...	4	—	1	2	—	2	1	4	1	1	1	1	—	—	9	9	18		
Meningitis (other forms)	...	22	10	3	4	1	8	3	1	1	3	5	3	1	—	34	31	65		
Locomotor Ataxy	...	—	—	—	—	—	—	—	—	—	1	1	5	5	—	11	1	12		
Ac. Poliomyelitis	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Other Diseases, Spinal Cord	...	—	—	—	—	—	1	1	1	4	8	4	9	9	4	2	26	17	43	
Cerebral Haemorrhage, Apoplexy	...	3	—	—	—	—	1	—	—	2	25	65	101	144	113	10	188	276	464	
Softening of Brain	...	—	—	—	—	—	—	—	—	—	1	5	5	7	1	11	8	19		
Paralysis (no sp. cause)	...	—	—	—	—	—	—	—	—	1	3	3	16	28	11	2	34	30	64	
General Paralysis of Insane	...	—	—	—	—	—	—	—	—	3	10	14	5	2	—	29	5	34		
Other Mental Alienation	...	—	—	—	—	—	—	—	—	1	—	2	1	—	—	3	2	5		
Epilepsy	...	—	1	—	—	—	1	2	7	3	4	4	4	11	5	2	23	21	44	
Convulsions (five and over)	...	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—	1		
Convulsions (under five)	...	93	11	2	4	1	—	—	—	—	—	—	—	—	—	66	45	111		
Chorea	...	—	—	—	—	—	—	3	2	2	—	—	—	—	—	4	3	7		
Hysteria, Neuralgia, Neuritis	...	—	—	—	—	—	—	—	—	—	1	1	4	2	1	1	4	6	10	
Other Dis. of Nervous System	...	1	—	—	—	1	2	1	4	1	4	4	9	6	—	18	15	33		
Diseases of Eyes and Annexa	...	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	2		
Mastoid Disease	...	—	1	—	1	1	—	1	1	—	2	1	—	1	—	4	5	9		
Other Diseases of Ears	...	3	1	—	—	5	3	2	4	3	2	—	1	—	—	15	9	24		
Pericarditis	...	—	—	1	—	—	1	1	—	1	2	3	4	—	1	8	6	14		
Acute Endocarditis	...	3	1	—	—	1	3	4	4	7	12	10	5	3	1	—	22	33	55	
Valvular Disease	...	1	—	—	—	7	9	11	13	29	59	66	101	118	53	8	224	251	475	
Fatty Degeneration of Heart	...	—	—	—	—	—	—	—	—	2	4	2	7	14	7	1	20	17	37	
Other Diseases of Heart	...	2	—	—	1	—	5	3	11	23	34	77	122	205	115	33	281	350	631	
Angina Pectoris	...	—	—	—	—	—	—	—	—	—	1	6	5	6	2	—	17	3	20	
Aneurysm	...	—	—	—	—	—	—	—	—	—	4	6	4	4	—	16	2	18		
Arterio-sclerosis	...	—	—	—	—	—	—	—	1	—	3	15	42	72	37	14	99	85	184	
Other Diseases of Arteries	...	—	—	—	—	—	—	—	—	—	—	—	—	1	2	—	3	—	3	
Cer. Embolism, Thrombosis	...	1	—	—	—	—	3	—	1	3	4	17	17	32	21	1	34	66	100	
Other Embolism and Throm.	...	—	—	—	—	—	—	1	—	—	—	—	1	2	—	2	2	4		
Diseases of Veins	...	—	—	—	—	—	—	—	—	—	1	2	1	3	—	2	5	7		
Status Lymphaticus	...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1		
Other Dis. of Lymph. System	...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1		
Other Dis. of Circulatory System	...	—	—	—	—	—	—	—	—	—	1	1	1	4	3	4	6	10		
Diseases of Nasal Fossæ	...	—	—	—	—	—	1	—	—	—	1	—	—	—	—	2	2	2		
Diseases of Larynx	...	3	4	3	5	1	3	—	2	1	1	—	2	—	—	9	16	25		
Diseases of Thyroid, Body	...	—	—	—	—	—	—	—	—	1	—	1	1	—	—	—	3	3		
Bronchitis	...	198	42	3	3	3	2	3	1	10	32	80	169	279	208	30	554	512	1066	
Broncho-pneumonia	...	249	134	38	21	10	28	7	2	2	9	8	12	17	21	9	1	306	262	568
Lobar Pneumonia	...	11	6	3	2	1	2	1	4	6	28	34	31	21	23	7	—	114	66	180
Pneumonia (type not stated)	...	29	14	7	6	4	9	2	6	10	26	32	45	30	26	13	4	153	110	263
Pleurisy	...	—	2	2	—	—	1	—	2	2	3	11	5	3	1	—	20	12	32	
Pul. Cong., Pul. Apoplexy	...	7	1	1	—	—	1	—	—	2	2	2	3	8	18	3	25	23	48	
Gangrene of Lungs	...	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1	1	2		

TABLE II.—*continued.*

CAUSE OF DEATH.	AGES.														Males	Fe- males	Per- sons.		
	0-	1-	2-	3-	4-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75-	85-			
Asthma	1	—	—	—	1	—	—	—	—	1	1	8	6	6	1	—	13	12	25
Pulmonary Emphysema . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fibroid Disease of Lungs . . .	—	—	—	—	—	—	—	—	—	1	2	2	1	1	—	6	1	7	
Other Dis. of Resp. System . . .	—	—	—	—	1	—	—	—	—	1	2	2	3	1	1	—	9	2	11
Diseases of Teeth and Gums . . .	2	—	—	1	—	—	—	—	—	—	2	—	—	—	—	—	3	2	5
Other Dis. of Mouth and Annexa . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dis. of Phar., Tonsilitis . . .	—	4	1	4	1	2	1	—	—	5	1	1	—	—	—	—	11	9	20
Diseases of the Oesophagus . . .	—	1	—	—	—	—	—	—	—	—	1	—	1	—	1	—	1	3	4
Perf. Ulcer of Stomach . . .	—	—	—	—	—	—	—	5	10	28	15	11	5	3	—	51	26	77	
Inflammation of Stomach . . .	31	3	1	—	2	—	—	—	—	1	5	8	13	8	—	35	37	72	
Other Diseases of Stomach . . .	—	—	—	—	—	1	1	—	—	1	—	2	1	1	—	6	2	8	
Diarrhoea, Enteritis . . .	206	31	9	2	3	6	3	—	1	2	9	5	10	9	10	3	174	135	309
Ankylostomiasis . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Intestinal Parasites . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Appendicitis . . .	—	1	—	—	2	10	10	12	3	6	12	5	1	2	1	—	40	25	65
Hernia . . .	2	—	—	—	—	—	—	—	1	1	3	2	8	12	6	—	13	22	35
Intestinal Obstruction . . .	9	3	—	—	—	1	—	2	—	4	5	5	6	7	8	—	21	29	50
Other Diseases of Intestines . . .	4	—	—	—	—	—	—	—	2	1	1	—	—	—	—	—	3	5	8
Acute Yellow Atrophy of Liver . . .	—	—	—	—	—	—	—	—	—	1	2	—	—	—	—	—	2	1	3
Hydatid of Liver . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cirrhosis of Liver . . .	—	—	—	1	—	—	1	—	—	1	4	12	13	5	4	—	23	18	41
Billiary Calculi . . .	—	—	—	—	—	—	—	—	—	—	1	—	5	2	—	—	1	7	8
Other Diseases of Liver . . .	—	—	—	1	—	—	—	1	—	2	1	1	2	5	3	—	6	10	16
Diseases of Spleen . . .	—	—	—	—	—	—	—	—	—	—	2	1	—	—	1	—	4	4	4
Peritonitis (cause unstated) . . .	2	2	—	—	3	1	1	1	2	—	—	2	—	—	—	—	7	8	15
Other Dis. of Digestive System . . .	—	—	—	—	—	—	—	—	—	1	—	1	2	—	—	—	3	1	4
Acute Nephritis . . .	2	—	—	—	—	3	3	1	1	4	3	3	3	3	—	—	9	17	26
Bright's Disease . . .	—	—	—	1	—	2	4	—	2	9	18	35	51	39	12	1	91	83	174
Chyluria . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Dis. of Kidney, etc. . .	1	1	—	—	—	—	—	1	—	1	2	1	3	1	1	—	7	5	12
Calculi, Urin. Passages . . .	—	—	—	—	—	—	—	1	—	2	1	—	—	1	—	—	4	1	5
Diseases of Bladder . . .	—	—	—	—	—	—	—	—	—	1	1	1	4	9	4	—	11	9	20
Diseases of Urethra, etc. . .	—	—	—	—	—	—	—	—	—	—	3	1	2	—	—	—	6	—	6
Diseases of Prostate . . .	—	—	—	—	—	—	—	—	—	—	1	3	15	11	—	—	30	—	30
Diseases of Male Organs . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Uterine Haemorrhage . . .	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	2	2
Uterine Tumour . . .	—	—	—	—	—	—	—	—	—	1	1	1	—	—	—	—	—	3	3
Other Diseases of Uterus . . .	—	—	—	—	—	—	—	—	—	1	2	1	—	—	—	—	4	4	4
Ovarian Tumours . . .	—	—	—	—	—	—	—	1	2	—	—	—	2	—	—	—	5	5	5
Other Dis. of Female Organs . . .	—	—	—	—	—	—	—	—	—	—	3	—	1	—	—	—	4	4	4
Diseases of Breast . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Accidents of Pregnancy . . .	—	—	—	—	—	—	—	—	—	—	4	—	—	—	—	—	4	4	4
Puerperal Haemorrhage . . .	—	—	—	—	—	—	—	—	—	1	5	6	—	—	—	—	12	12	12
Other Accidents of Childbirth . . .	—	—	—	—	—	—	—	—	1	1	2	3	1	—	—	—	8	8	8
Puerperal Fever . . .	—	—	—	—	—	—	—	—	2	6	27	16	—	—	—	—	51	51	51
Puer. Albria and Convulsions . . .	—	—	—	—	—	—	—	—	—	1	5	4	—	—	—	—	10	10	10
Phleg. Dolens. Embolism . . .	—	—	—	—	—	—	—	—	—	1	4	—	—	—	—	—	5	5	5
Puerperal Insanity . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Dis. of Breast . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Senile Gangrene . . .	—	—	—	—	—	—	—	—	—	—	—	2	10	7	—	—	8	11	19
Gangrene (other types) . . .	1	—	—	—	—	1	—	—	1	1	1	3	1	—	—	—	4	5	9
Carbuncle, Boil . . .	—	—	—	—	—	—	—	—	—	1	1	2	2	2	—	—	6	—	6

TABLE II.—*continued.*

CAUSE OF DEATH.	AGES.															Males	Fe- males	Per- sons.		
	0-	1-	2-	3-	4-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75-	85-				
Ac. Abscess, Phlegmon	5	1	—	—	—	—	2	—	—	—	3	4	3	2	—	—	13	7	20	
Dis. of Integ. System	5	—	—	—	—	—	—	—	—	2	—	3	1	2	1	8	6	14		
Diseases of Bones	1	2	—	—	1	4	1	1	2	—	—	1	1	—	—	—	13	1	14	
Diseases of Joints	1	—	—	—	1	—	—	—	1	—	—	—	2	1	—	2	4	6		
Amputations	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Other Dis. of Locomotor System	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	1		
Congenital Malformations	96	—	1	—	4	—	2	1	1	—	—	—	—	—	—	60	45	105		
Premature Birth	507	—	—	—	—	—	—	—	—	—	—	—	—	—	—	296	211	507		
Infantile Debility, Icterus, etc.	207	—	—	—	—	—	—	—	—	—	—	—	—	—	—	130	77	207		
Other Diseases of early infancy	64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	35	29	64		
Lack of care	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	2	9		
Old age	—	—	—	—	—	—	—	—	—	—	—	6	123	321	126	247	329	576		
Suicide—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Poison	—	—	—	—	—	—	—	—	—	—	1	6	5	2	3	3	13	7	20	
Asphyxia	—	—	—	—	—	—	—	—	—	—	—	1	2	2	—	1	4	2	6	
Hanging, Strangulation	—	—	—	—	—	—	—	—	—	—	1	—	6	5	3	2	13	4	17	
Drowning	—	—	—	—	—	—	—	—	—	—	2	3	5	7	4	—	1	16	6	
Firearms	—	—	—	—	—	—	—	—	—	—	3	2	—	—	1	—	5	1	6	
Cutting and Piercing	—	—	—	—	—	—	—	—	—	—	1	—	1	3	3	2	7	1	13	
Jumping from high places	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	1	
Crushing	—	—	—	—	—	—	—	—	—	—	1	—	—	1	3	—	—	6	—	
Other suicides	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	2	—	2	
Poisoning by Food	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Other acute poisonings	—	—	—	1	—	—	—	—	—	—	—	1	—	1	—	—	2	1	3	
Conflagration	—	1	—	—	—	—	—	—	—	—	3	—	—	2	—	—	1	5	6	
Burns (conflagration excepted)	6	7	5	5	3	7	3	3	2	1	1	2	3	3	1	—	26	26	52	
Deleterious Gases	—	29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	15	29	
Accidental Drowning	—	—	—	1	1	7	6	3	1	3	2	—	2	1	—	—	24	3	27	
Injury—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Firearms	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	1	
Cutting or Piercing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Fall	—	—	—	—	—	—	1	1	1	—	2	5	8	10	24	16	6	47	27	74
Mines and Quarries	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	2	—	2	
Machines	—	—	—	—	—	—	—	1	2	—	1	—	2	—	1	—	6	1	7	
Other Crushing	—	—	—	1	2	2	7	11	6	5	8	11	12	12	8	5	4	74	20	94
By Animals	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	1	
Starvation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Excessive Cold	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Effects of Heat	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	1	
Lightning	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Electricity	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	1	
Homicide by Firearms	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	1	
Homicide by Cutting or Piercing	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	2	—	2	
Homicide by other means	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	2	—	2	
Fractures (not specified)	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	1	
Other Violence	—	—	—	—	—	—	—	—	—	1	2	3	1	1	1	—	7	2	9	
Dropsey	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	1	—	1	
Syncope (I-70)	—	—	—	—	—	—	—	—	—	—	1	1	—	4	3	—	4	5	9	
Sudden Death (not defined)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Heart Failure (I-70)	—	1	1	—	—	—	—	—	—	1	6	14	24	11	1	—	41	18	59	
Other ill-defined causes	—	3	3	—	1	1	—	—	—	1	1	—	—	—	—	—	5	5	10	
Cause not specified	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	—	1	
Totals	...	2072	493	177	152	116	343	178	201	256	619	947	1201	1436	1744	1209	265	5956	5453	11409

TABLE IV.

Deaths under One Year Registered in, or belonging to, each Ward during the Year ending January 1st, 1921.

TABLE V.

Cases of Infectious Disease notified during each Week of the Year 1920.

WEEK.																					
Number.	Ending.	Enteric Fever.	Continued Fever.	Malaria.	Trench Fever.	Smallpox.	Scarlet Fever.	Diphtheria.	Dysentery.	Erysipelas.	Pulmonary Tuberculosis.	Other	Tuberculosis.	Euophelitis	Lethargies.	Cerebro-Spinal Fever.	Polyarthritis.	Pneumonia.	Puerperal Fever.	Ophthalmia Neonatorum.	Total.
	1920																				
1	Jan. 10	1	—	4	—	—	109	28	—	8	40	18	—	—	—	—	33	2	12	255	
2	" 17	—	—	3	—	—	119	32	—	11	47	14	—	—	—	—	28	5	11	270	
3	" 24	1	—	6	—	—	110	37	—	9	47	11	1	2	—	—	22	5	14	265	
4	" 31	1	—	2	—	—	114	38	—	6	75	9	—	1	—	—	20	4	11	281	
5	Feb. 7	—	—	5	—	—	116	42	—	12	79	14	1	—	—	—	39	5	7	320	
6	" 14	—	—	7	—	—	106	26	—	7	63	7	—	1	—	—	37	10	7	271	
7	" 21	—	—	7	—	—	97	45	1	7	59	8	—	—	—	—	38	5	12	279	
8	" 28	1	—	5	—	—	83	35	—	9	48	9	—	—	—	—	59	2	12	263	
9	March 6	—	—	5	—	—	88	31	—	5	53	11	—	—	—	—	59	2	13	267	
10	" 13	—	—	6	—	—	89	39	—	4	59	6	—	1	—	—	66	8	13	291	
11	" 20	—	—	4	—	—	86	36	—	9	59	10	—	—	—	—	79	4	12	299	
12	" 27	—	—	3	—	—	78	29	—	8	64	9	2	3	—	—	76	5	14	291	
13	April 3	—	—	4	—	—	78	30	—	11	40	7	—	—	—	—	128	4	9	311	
14	" 10	—	—	6	—	—	72	26	—	5	55	3	—	—	—	—	100	2	9	278	
15	" 17	—	—	5	—	—	60	25	—	6	64	4	—	—	—	—	90	5	9	268	
16	" 24	—	—	7	—	—	75	29	—	9	60	3	—	—	—	—	61	1	9	254	
17	May 1	—	—	2	—	—	90	39	1	11	56	6	1	1	—	—	55	1	8	271	
18	" 8	1	—	7	—	—	87	28	1	6	50	8	2	1	—	—	37	7	12	247	
19	" 15	—	—	4	—	—	78	23	—	4	44	4	—	—	—	—	45	—	5	207	
20	" 22	—	—	3	—	—	83	29	—	3	61	10	—	—	—	—	49	1	7	246	
21	" 29	—	—	3	—	—	74	17	—	7	45	1	1	—	—	—	36	—	10	194	
22	June 5	—	—	3	—	—	70	18	—	7	62	2	—	1	—	—	21	1	11	196	
23	" 12	—	—	4	—	—	73	36	—	6	55	3	—	—	—	—	14	—	11	202	
24	" 19	1	—	7	—	—	110	29	1	12	50	9	2	—	—	—	17	1	15	254	
25	" 26	—	—	4	—	—	88	33	—	3	58	12	2	3	—	—	18	2	11	234	
26	July 3	—	—	4	—	—	106	28	—	4	73	13	—	2	—	—	28	1	6	265	
27	" 10	—	—	—	—	—	111	27	—	5	56	12	—	—	—	—	16	1	5	233	
28	" 17	—	—	1	—	—	114	37	1	7	52	9	—	2	—	—	17	4	2	246	
29	" 24	—	—	7	—	—	114	27	—	8	60	8	1	—	—	—	17	4	2	248	
30	" 31	—	—	5	—	—	95	25	—	4	49	9	1	1	—	—	14	4	3	210	
31	August 7	—	—	2	—	—	95	21	—	9	30	4	—	—	—	—	20	1	4	186	
32	" 14	—	—	1	—	—	102	13	1	9	35	5	—	—	—	—	14	1	3	184	
33	" 21	—	—	—	—	—	97	16	—	8	52	7	1	—	—	—	14	3	9	207	
34	" 28	—	—	1	—	—	117	20	—	7	33	1	—	—	—	—	15	2	7	203	
35	Sept. 4	1	—	—	—	—	108	32	—	9	48	8	—	—	—	—	16	5	11	238	
36	" 11	—	—	1	—	—	121	26	—	7	34	2	—	—	—	—	13	—	8	212	
37	" 18	—	—	2	—	—	155	36	—	3	31	4	—	—	—	—	15	—	13	259	
38	" 25	—	—	7	—	—	137	26	—	11	51	7	1	—	1	—	20	2	5	268	
39	Oct. 2	—	—	—	—	—	158	47	1	5	44	6	—	—	—	—	22	2	8	293	
40	" 9	—	—	1	—	—	165	43	—	6	59	3	—	1	—	—	21	3	4	306	
41	" 16	—	—	1	—	—	175	45	—	7	52	5	—	1	—	—	11	1	10	308	
42	" 23	—	—	—	—	—	167	58	—	11	44	6	—	—	—	—	10	4	10	310	
43	" 30	—	—	2	—	—	184	54	1	10	31	5	—	1	—	—	6	3	7	304	
44	Nov. 6	1	—	—	—	—	120	31	—	13	50	12	—	—	—	—	21	4	6	258	
45	" 13	—	—	—	—	—	114	31	1	6	42	16	—	—	—	—	28	5	7	250	
46	" 20	1	—	—	—	—	121	45	—	11	53	5	1	—	—	—	18	2	12	269	
47	" 27	—	—	—	—	—	122	42	1	7	44	7	—	—	—	—	30	2	6	261	
48	Dec. 4	—	—	—	—	—	126	66	—	7	42	1	1	—	—	—	19	2	7	271	
49	" 11	—	—	—	—	—	119	43	—	14	42	6	—	—	—	—	25	3	11	263	
50	" 18	1	—	—	—	—	107	57	—	3	39	—	—	2	—	—	28	4	3	244	
51	" 25	1	—	—	—	—	96	37	2	5	35	2	—	1	—	—	17	—	6	202	
52	Jan.(1921)	1	—	3	—	—	84	42	1	4	35	4	—	—	—	—	31	3	5	213	
	Total	12	—	154	—	—	5563	1755	13	385	2609	365	18	25	1	1733	148	444	13225		

TABLE VI.
Cases of Infectious Disease notified during the Year 1920. Classified according to Ages.

Disease.	AGES.								Total
	0-	1-	2-	3-	4-	5-	10-	15-	
Enteric Fever ..	—	—	—	—	—	—	—	—	—
Continued Fever ..	—	—	—	—	—	—	—	—	—
Malaria ..	—	—	—	—	—	—	—	—	—
Trench Fever ..	—	—	—	—	—	—	—	—	—
Smallpox ..	—	—	—	—	—	—	—	—	—
Scarlet Fever ..	—	—	—	—	—	—	—	—	—
Diphtheria ..	27	48	71	114	129	2817	310	131	3563
Dysentery ..	—	—	—	—	1	—	—	1	1755
Erysipelas..	12	6	4	1	4	13	20	16	13
Pulmonary Tuberculosis ..	2	5	7	6	13	193	177	181	385
Tuberculous Meningitis ..	15	6	6	—	5	5	1	—	2609
Tuberculosis of Peritoneum and Intestines ..	—	—	—	—	5	—	—	—	39
Tuberculosis of Spinal Column ..	8	2	4	2	2	10	10	4	48
Tuberculosis of Joints ..	—	—	—	1	4	—	—	—	—
Tuberculosis of Other Organs ..	—	5	4	7	11	58	49	26	187
Disseminated Tuberculosis ..	2	1	1	1	—	9	2	1	22
Encephalitis Lethargica ..	—	—	1	—	—	3	3	1	18
Cerebro-Spinal Fever ..	3	4	3	—	3	—	1	2	25
Poliomyelitis ..	—	—	—	—	—	—	—	1	1
Pneumonia ..	121	112	52	57	49	211	87	86	1733
Puerperal Fever ..	—	—	—	—	—	—	2	—	148
Ophthalmia Neonatorum	444	—	—	—	—	—	—	—	444
Total	669	305	366	556	672	4059	1712	729	117
							810	1413	1040
							522	219	35
								117	1
									13225

TABLE VII.
Cases of Infectious Disease notified during the Year 1920. Classified according to Wards.

DISEASE.	All Saints'.	Green.	Aiton.	Baselin Heath.	Bridgwater.	Bridgnorth (North).	Bridgnorth (South).	Budleigh Melchells.	Edgbaston.	Hanworth.	Harrowme.	Market Hall.	Moseley and Heath.	Northfield.	Nottingham.	Kings Norton.	Ladywood.	Lozells.	Market Harborough.	Meers'.	St. Bart's.	St. Mary's.	Se. Paul's.	Small Heath.	Soho.	Sparbrook.	Sparhill.	Washwood Heath.	Wardley.	City.	Not Located.				
Enteric Fever	2	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	12				
Continued Fever	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	154				
Malaria	—	3	12	6	2	3	8	1	1	8	3	1	12	13	—	—	2	1	6	4	2	5	5	4	1	4	7	4	—					
Trench Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
Scarlet Fever	194	209	224	399	255	115	58	86	83	80	96	142	168	106	129	22	188	339	549	210	190	198	148	143	241	182	280	149	136	126	118	5563		
Diphtheria	49	50	85	111	66	51	58	42	61	68	46	40	79	37	30	6	79	80	60	62	57	76	42	36	55	52	67	39	81	44	76	1755		
Dysentery	—	—	—	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	2	13			
Erysipelas	—	—	—	14	16	16	12	19	7	8	14	13	3	17	15	10	9	1	10	21	24	16	15	10	6	16	13	10	7	4	16	385		
Pulmonary Tuberculosis	61	141	124	113	173	53	42	41	78	29	36	127	90	49	50	19	172	168	176	161	106	71	29	65	63	79	95	49	87	37	25	2669		
Tubercular Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39			
Tuberculosis of Peritoneum and Intestines	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	48			
Tuberculosis of Spinal Column	2	1	1	—	2	—	2	1	—	1	1	—	1	1	—	1	—	2	1	2	1	2	1	1	—	2	1	—	1	—	265			
Tuberculosis of Joints	3	7	13	6	5	2	7	3	7	6	1	2	2	2	1	—	—	15	14	16	8	10	7	1	5	4	11	3	2	4	5	187		
Tuberculosis of other Organs	—	—	—	1	1	—	2	—	1	1	1	3	1	—	1	—	—	—	2	2	1	1	2	1	1	—	—	—	—	1	22			
Disseminated Tuberculosis	—	—	—	1	1	—	2	—	1	—	1	—	1	—	1	—	4	1	1	1	2	—	—	—	—	—	—	—	—	—	18			
Encephalitis Letargica	1	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	1	1	—	1	—	2	—	—	2	1	—	—	—	—	25			
Cerebro-Spinal Fever	—	—	2	—	2	—	—	—	—	—	—	—	—	—	—	—	3	1	1	—	3	2	—	—	—	—	—	—	—	—	1			
Pollomyelitis	—	—	51	121	64	33	91	53	34	23	61	37	36	86	83	43	18	89	92	68	111	135	28	16	59	36	27	58	56	20	51	18	1733	
Pneumonia	4	6	5	8	11	2	3	3	5	2	4	5	8	2	41	15	5	8	2	22	31	31	41	33	12	3	10	8	7	11	5	2	3	144
Puerperal Fever	4	34	18	20	31	4	5	8	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	144		
Ophthalmia Neonatorum	39	612	567	718	660	308	190	220	323	245	227	489	483	250	283	73	597	780	950	639	571	417	257	346	453	381	545	330	358	307	266	132295		

TABLE VIII.

*Temperature of the Air and Ground, Rainfall, Sunshine, and Wind, in each Month of the Year 1920.
Observed at the Birmingham and Midland Institute Observatory, Edgbaston,
by Mr. A. J. Kelley.*

MONTH.	TEMPERATURE OF THE AIR.			TEMPERATURE OF THE GROUND.		RAINFALL IN INCHES.		MILES OF WIND.					
	Highest in the shade.	Lowest in the shade.	Mean for the month	Maximum at 1 foot deep.	Maximum at 4 feet deep.	Hours of Sunshine.	Days on which 0.01 inch or more of rain fell.	Above or below the average.*	1920.				
	1920.	Above or below the previous highest.*	1920.	Above or below the previous lowest.*	1920.	Above or below the average.*	1920.	Above or below the average.*	1920.				
JAN.	54.5	-3.5	22.6	+11.8	40.8	+3.0	45.0	+12	3.08	+1.11	22	13275	+4025
FEB.	59.9	-2.0	29.2	+21.2	42.9	+4.2	43.4	+18	1.14	-0.54	11	10097	+ 601
MAR.	62.2	-7.7	27.2	+8.2	44.5	-3.6	47.3	+26	2.76	+0.76	21	10757	+ 216
APRIL	61.9	-10.0	34.2	+18.3	46.5	+0.9	47.4	-67	4.69	+3.14	28	9691	+ 131
MAY	77.1	-5.1	37.9	+6.9	53.3	+1.5	57.0	+ 6	2.71	+0.61	16	9899	+1087
JUNE	76.2	-6.7	39.5	+1.9	57.6	-0.1	57.2	-9	3.34	+1.20	15	7587	- 726
JULY	73.0	-15.5	46.2	+6.7	57.0	-2.1	57.5	-69	3.62	+1.31	24	8986	+ 701
AUGUST	71.5	-22.4	44.1	+2.9	56.4	-3.1	56.6	-62	1.99	-0.84	14	7908	- 588
SEPT.	72.5	-18.1	40.9	+8.4	55.9	+0.3	56.0	-35	1.98	+0.17	15	6938	-1123
OCT.	70.0	-6.5	36.0	+8.1	50.7	+2.2	54.7	-6	3.08	+0.38	17	7705	-1303
NOV.	58.1	-3.5	28.0	+8.0	44.3	+1.7	48.8	+ 5	0.69	-1.55	11	8177	- 890
DEC.	54.4	-2.4	15.3	-0.9	39.5	-0.3	45.8	-6	2.44	-0.33	17	9611	- 992

* In the thirty-three years 1887-1919.

TABLE IX.
Meteorology and Mortality in each Week of the Year 1920.

Number.	WEEK.	Ending. 1920.	Total Deaths.	Deaths under 1 year.	Deaths 65 and up.	DEATHS FROM						TEMPERATURE						Hours of Sunshine.	Rainfall in Inches.						
						Measles.			Whooping Cough.			Diarrhea and Enteritis under 2.			Pulmonary Tuberculosis.			Other Forms of Tuberculosis.		of the Air.		of Ground			
						Measles.	Whooping Cough.	Diarrhea and Enteritis under 2.	Pulmonary Tuberculosis.	Other Forms of Tuberculosis.	Respiratory Diseases.	Highest in Shade.	Lowest in Shade.	Mean of Daily Maxima & Minima.	Highest 4 Foot Deep.	Horizontal Movement of Air in Miles.									
1	Jan.	10	263	33	73	3	3	3	17	6	60	53	23	37	44.6	2816	6.3	1.14							
2	"	17	228	36	72	—	1	1	16	3	54	54	34	46	43.9	3500	10.3	0.24							
3	"	24	227	36	70	2	9	6	20	1	38	55	33	43	44.2	2822	7.2	0.30							
4	"	31	245	42	71	2	6	6	17	5	45	51	32	40	44.2	3135	19.4	1.32							
5	Feb.	7	257	35	62	—	10	3	25	5	55	52	30	42	43.9	2665	12.3	0.11							
6	"	14	246	41	72	—	6	2	15	5	61	52	36	45	43.8	3326	10.6	0.18							
7	"	21	265	53	76	—	10	3	19	3	46	59	32	43	44.1	2157	22.8	0.80							
8	"	28	270	34	79	1	8	4	20	—	72	49	29	40	44.1	1565	12.8	0.04							
9	Mar.	6	268	45	69	—	8	5	13	3	73	60	32	45	44.0	2309	21.7	0.35							
10	"	13	277	53	70	1	3	3	15	3	84	48	27	39	44.0	2351	21.1	0.44							
11	"	20	312	49	83	—	6	1	24	1	81	60	32	43	43.6	2710	19.4	0.94							
12	"	27	347	63	81	4	17	3	17	2	96	62	36	48	44.1	2497	32.8	0.65							
13	April	3	292	56	76	1	9	3	20	2	79	62	39	48	44.9	1911	10.5	0.76							
14	"	10	297	66	66	3	9	2	15	5	90	60	39	45	45.0	1667	4.9	1.20							
15	"	17	286	97	69	3	4	4	17	5	84	55	41	48	45.2	2719	7.6	1.43							
16	"	24	260	75	61	1	7	2	19	—	79	62	37	48	45.5	2328	16.8	1.17							
17	May	1	222	56	50	3	4	3	13	1	70	56	34	46	45.9	2598	29.6	0.85							
18	"	8	262	55	76	3	6	2	17	2	60	57	38	48	46.0	3045	29.0	0.48							
19	"	15	240	52	72	5	4	7	16	1	56	65	38	52	46.4	2075	45.9	0.48							
20	"	22	227	36	62	2	7	2	18	4	44	67	43	52	47.0	2536	38.6	0.24							
21	"	29	204	45	63	3	3	3	10	2	32	77	47	62	48.6	1346	47.6	1.09							
22	June	5	162	34	41	1	2	4	13	3	31	71	40	55	49.7	2255	40.0	0.11							
23	"	12	169	34	44	2	3	3	12	2	24	66	41	54	49.9	1644	35.6	1.52							
24	"	19	155	29	52	1	2	—	13	3	14	76	50	61	50.8	1372	30.2	1.07							
25	"	26	176	26	42	2	4	4	22	3	17	69	48	59	51.5	1688	28.4	0.17							
26	July	3	196	38	49	4	5	5	15	3	28	69	49	58	51.8	2130	19.9	1.61							
27	"	10	167	27	48	—	1	7	14	5	17	63	47	54	52.0	1897	8.0	1.10							
28	"	17	175	26	54	4	4	2	17	2	20	68	49	59	52.0	2072	19.3	0.31							
29	"	24	180	30	59	1	3	4	13	6	22	73	47	59	52.1	2244	37.0	0.60							
30	"	31	166	17	53	3	1	5	17	2	15	70	42	56	52.4	1909	22.4	0.56							
31	Aug.	7	166	34	55	1	1	6	10	2	24	66	47	56	52.8	2218	28.4	0.48							
32	"	14	181	40	46	2	—	8	10	6	12	70	50	58	52.6	1558	14.4	1.13							
33	"	21	208	26	62	1	1	9	22	4	26	72	44	56	53.0	2093	21.1	0.12							
34	"	28	156	28	39	2	1	10	10	2	14	71	47	56	52.8	1502	16.2	0.26							
35	Sept.	4	156	26	51	1	1	5	11	1	17	68	44	56	52.7	1544	17.1	0.24							
36	"	11	155	37	42	1	1	8	10	2	20	69	45	59	52.8	1656	21.7	0.17							
37	"	18	172	26	41	—	1	3	19	4	21	73	45	55	53.0	1749	22.8	1.28							
38	"	25	171	35	47	—	—	4	13	4	34	66	41	52	52.9	1503	10.9	0.02							
39	Oct.	2	184	29	55	—	2	8	19	2	24	67	44	55	52.0	1399	16.9	0.69							
40	"	9	177	29	45	4	—	6	14	2	23	70	43	57	52.2	2050	18.8	1.50							
41	"	16	173	32	41	3	—	6	16	2	22	62	47	54	52.5	1617	12.5	0.63							
42	"	23	218	42	64	6	—	5	16	1	30	57	36	48	52.2	1601	13.3	0.06							
43	"	30	189	35	58	5	1	15	14	5	29	55	37	45	51.4	1644	19.0	0.02							
44	Nov.	6	189	36	65	6	—	8	17	1	23	53	34	42	50.5	1799	6.1	0.45							
45	"	13	240	42	81	9	1	2	15	4	48	56	37	48	49.6	2116	24.3	0.13							
46	"	20	215	30	79	8	—	2	17	3	41	58	36	46	49.1	2622	14.1	0.15							
47	"	27	215	37	58	11	2	8	17	3	45	53	28	40	48.7	1645	5.5	0.04							
48	Dec.	4	199	31	60	4	—	6	23	7	33	54	38	44	47.9	2901	11.5	0.70							
49	"	11	211	44	67	6	1	8	13	4	23	44	29	38	47.8	1596	7.2	0.04							
50	"	18	260	33	88	8	—	3	23	4	55	38	15	30	46.9	1720	1.4	0.04							
51	"	25	247	42	76	4	2	1	14	3	60	53	30	40	45.6	2174	1.8	0.52							
52	Jan. (1921)	1	268	39	83	10	2	4	21	4	61	54	43	48	45.8	2371	5.6	1.81							

